

STIC Search Report

STIC Database Tracking Number: 121412

TO: Fred Ehichoya

Location: 4D4 Art Unit: 2172

Thursday, May 13, 2004

Case Serial Number: 09/992652

From: Carol Wong Location: EIC 2100

PK2-4B33

Phone: 305-9729

carol.wong@uspto.gov

Search Notes

Dear Examiner Ehichoya,

Attached are the search results (from commercial databases) for your case.

Color tags mark the patents/articles which appear to be most relevant to the case. Pls review all documents, since untagged items might also be of interest. If you wish to order the complete text of any document, pls submit request(s) directly to the EIC2100 Reference Staff located in PK2-4B40.

Pls call if you have any questions or suggestions for additional terminology, or a different approach to searching the case. Finally, pls complete the attached Search Results Feedback Form, as the EIC/STIC is continually soliciting examiners' opinion of the search service.

Thanks, Carol



File 347: JAPIO Nov 1976-2003/Dec(Updated 040402) (c) 2004 JPO & JAPIO File 350:Derwent WPIX 1963-2004/UD, UM &UP=200429 (c) 2004 Thomson Derwent Set Items Description S1 JEDEC OR (JT OR JOINT)()ELECTRONIC?? ?()DEVICE? ? ()ENGINE-ER? ? OR JESD3()C OR JESD()3 S2 13754 PLD OR PLDS OR FPLD OR FPLDS OR PAL OR PALS OR EPLD OR EPL-DS OR PLA OR PLAS OR PROM OR PROMS OR SPLD OR SPLDS OR CPLD -OR CPLDS OR FPGA OR FPGAS ROM OR ROMS OR EPROM OR EPROMS OR EEPROM OR EEPROMS OR UVR-S3 132165 OM OR UVROMS OR PEEL OR PEELS OR GAL OR GALS S4 102554 PROGRAMABLE OR PROGRAMMABLE OR PROGRAMED OR -PROGRAMING OR PROGRAMMING 2295 S5 S4 (1W) LOGIC (1W) DEVICE? ? \$6 1739 S4(1W)LOGIC(1N)ARRAY? ? **S7** 2230 S4 (1W) GATE? ? (1W) ARRAY? ? S8 122 S4()(IC OR ICS) S9 501 S4(1W)INTEGRATED()CIRCUIT??????? S10 S4(1W)ELLECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ? 0 S11 5 GENERIC (1W) ARRAY? ? (1W) LOGIC? ? S12 14675 (READONLY OR READ()ONLY)(1W)(MEMORY? OR MEMORIES OR STORAG-E?) STORAGE? OR STORE? ? OR STORING OR MEMORY? OR MEMORIES OR -S13 2152912 PRESTOR??? ? S13(3N)(FIELD? ? OR SPACE? ? OR AREA? ? OR REGION? ? OR SE-S14 291957 CTOR? ? OR ZONE? ? OR SECTION? ? OR PART OR PARTS OR PORTION? 381480 S13 (3N) DATA S15 S13(3N) (PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PRO-S16 105618 PERTY? OR PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATT-RIBUTES OR BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR -FEATURES) S4(1W)ELECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ? S17 BINARY (1W) TREE? ? OR HUFFMAN 1940 S18 PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PROPERTY? OR S19 2991072 PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATTRIBUTES OR BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR FEATURES S19(3N) (COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PACK-S20 81323 ED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR REDU-C? OR REDN? ? OR DIMINISH?) S19(3N) (REDUC??? ? OR REDUCTION? OR DECREAS? OR DECREMENT? S21 81569 OR ENCOD??? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? -NONCONFORM? OR INCOMPAT? OR INOPERA? OR UNUSUAL OR DYSFUNC-S22 413853 T? OR INCOMPLETE? OR DEVIA? OR IRREGULAR? OR EXCEPTION? ? OR -DISTORT? DISFUNCT? OR UNCONFORM? OR UNCOMPAT? OR UNCOMPLET? OR DISC-S23 447550 REPAN? OR DEGRAD? OR DISPARAT? OR BUG? ? OR ERROR? ? OR CORRU-PT? OR INVALID? MISTAK? OR FAIL???? ? OR PROBLEM? ? OR FAULT? OR DEFECT? OR S24 3436179 DEFICIEN? OR ABNORMA? OR DAMAG? OR FLAW? OR IMPAIR? 78162 ABERRA? OR MALFUNCTI? OR IMPERFECT? S25 S26 11523 DEBUG? OR DE()BUG????? ? OR ECC OR ECCS OR EDAC OR EDACS

S4(1W)ELECTRICAL?? ?(1W)ERAS?(1W)LOGIC? ?

BING? OR SEARCH? OR SURVEY?)

S22:S25(3N) (DETECT? OR DET? ? OR DETERMIN? OR CHECK? OR CH-

S22:S25(3N) (DISCRIMINAT? OR ANALYS? OR ANALYT? OR ANALYZ? -

EQU? OR DX OR TRACE? ? OR TRACING OR SEEK? OR PROBE? ? OR PRO-

OR ASSESS? OR SELFDIAGNOS? OR SELFTEST? OR BIST OR EXAMIN? OR

S27

S28

S29

20

232639

37450

```
LOCAT? OR REVIEW?)
                S22:S25(3N) (DIAGNOS? OR IDENTIFY? OR IDENTIFIE? ? OR IDENT-
S30
        69353
             IFIC? OR SCREEN? OR APPRAIS? OR EVALUAT? OR SENS??? ? OR RECO-
             GNIS? OR RECOGNIZ? OR RECOGNIT?)
                S22:S25(3N) (INSPECT? OR MONITOR? OR TRACK? OR TEST??? ? OR
S31
       252242
             SCAN OR SCANS OR SCANNED OR SCANN??? ? OR FILTR? OR DETECT???
             ? OR FILTER??? ?)
                DATA(3N)(COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PAC-
S32
        62651
             KED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR RED-
             UC? OR REDN? ? OR DIMINISH?)
S33
        27090
                DATA(3N)(DECREAS? OR DECREMENT? OR ENCOD????? ? OR CODIFY? -
             OR CODIFIE? OR CODIFIC? OR INCOD??? ?)
                 (S2:S3 OR S5:S12 OR S27) AND S1
S34
           11
        31558
                 (S2:S3 OR S5:S12 OR S27) AND S14:S16
S35
                S35 AND (S18 OR S20:S21 OR S32:S33)
S36
         1663
S37
                S36 AND S28:S31
           62
                S36 AND S26
S38
           13
S39
            0
                S37 AND S1
                S36 AND S1
S40
            0
                S35 AND S1
S41
            0
           72
                S37:S38
S42
S43
       220652
                IC='H01L-027'
S44
        46681
                IC='H03K-019'
S45
         4073
                MC='U21-C01E'
S46
          869
                MC='U21-C01X'
S47
        87507
                IC='G06F-011'
S48
       103373
                IC='G06F-012'
         1619
                MC='T01-G01A'
S49
                S34 OR S37:S38
S50
           83
S51
           22
                S50 AND S43:S49
S52
           22
                IDPAT (sorted in duplicate/non-duplicate order)
S53
           20
                IDPAT (primary/non-duplicate records only)
S54
          851
                MC='W01-A02A'
                MC='W02-J03B1'
S55
         3499
                MC='T01-D02'
S56
         9366
                IC='G06F-005'
S57
         9410
S58
       300204
                IC='H04N-001'
                IC='H03M-007'
S59
        31135
                S50 AND S54:S59
S60
           11
                S60 NOT S51
S61
           10
S62
           10
                IDPAT (sorted in duplicate/non-duplicate order)
S63
                IDPAT (primary/non-duplicate records only)
```

•

?

53/9/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

015504430 **Image available**
WPI Acc No: 2003-566577/200353

XRPX Acc No: N03-450388

Content addressable memory functionality testing method in integrated circuits, tests memory array using read/write matching, priority encoding, match flag, invalidate data and valid data restricted search operations

Patent Assignee: AGERE SYSTEMS INC (AGER-N)

Inventor: HIGGINS F P; LEWANDOWSKI J L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 6543016 B1 20030401 US 99433759 A 19991104 200353 B

Priority Applications (No Type Date): US 99433759 A 19991104

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6543016 B1 23 G11C-029/00

Abstract (Basic): US 6543016 B1

NOVELTY - The memory array is tested using the read/write operation, matching operation, priority encoding operation, match flag

operation and multiple match flag operation of the content addressable memory (CAM). The memory array is also **tested** using an **invalidate** data operation and a valid data restricted search operation.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for integrated circuit having a CAM system.

USE - For testing SRAM type faults, match faults, wild card faults, valid/invalid data faults in memory arrays e.g. flash electrically erasable programmable ROM, dynamic RAM and ROM, static RAM (SRAM), used in integrated circuit devices such as cellular telephones, answering machines, cordless telephones.

ADVANTAGE - Allows for efficiently combining the testing of the operations of content addressable memory and hence results in higher performance efficiency.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the CAM testing method.

pp; 23 DwgNo 2/4

Title Terms: CONTENT; ADDRESS; MEMORY; FUNCTION; TEST; METHOD; INTEGRATE; CIRCUIT; TEST; MEMORY; ARRAY; READ; WRITING; MATCH; PRIORITY; ENCODE; MATCH; FLAG; INVALID; DATA; VALID; DATA; RESTRICT; SEARCH; OPERATE

Derwent Class: S01; U14

International Patent Class (Main): G11C-029/00

International Patent Class (Additional): G06F-011/00

File Segment: EPI

Manual Codes (EPI/S-X): S01-G02B; U14-A05; U14-D; U14-D01B; U14-D03

53/9/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014389440 **Image available**
WPI Acc No: 2002-210143/200227

XRPX Acc No: NO2-160554

Defect discovery method for memory, involves writing data in portion of memory area to be read out for analyzing and judging defective data and address lines

Patent Assignee: HITACHI LTD (HITA); HITACHI SCI SYSTEMS KK (HITA-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 2001243121 A 20010907 JP 200055950 A 20000228 200227 B

Priority Applications (No Type Date): JP 200055950 A 20000228 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes JP 2001243121 A 10 G06F-012/16

Abstract (Basic): JP 2001243121 A

NOVELTY - Several data lines and address lines are provided independently to a memory (6) mounted on a circuit board. Data is written-in a portion of memory area and then read out. Each read data is analyzed for judging defective data line or address line.

USE - For discovering defect in memory mounted on central processing unit (CPU) board.

ADVANTAGE - **Defect analysis** time is reduced and specific discovery of defective address line and data line is possible. Also write-in area can be reduced during defect discovery in CPU board and necessity of data elimination is reduced, thus reducing data elimination time.

DESCRIPTION OF DRAWING(S) - The figure shows the CPU board with

```
memory . (Drawing includes non-English language text).
   read
       Memory (6)
       pp; 10 DwgNo 13/13
Title Terms: DEFECT; DISCOVER; METHOD; MEMORY; WRITING; DATA; PORTION;
  MEMORY; AREA; READ; JUDGEMENT; DEFECT; DATA; ADDRESS; LINE
Derwent Class: S01; T01; U11; U13; U14
International Patent Class (Main): G06F-012/16
International Patent Class (Additional): G01R-031/28; G06F-011/22;
  G11C-029/00
File Segment: EPI
Manual Codes (EPI/S-X): S01-G01A1; T01-G02A; T01-H05B; U11-F01D2; U13-C07;
  U14-D01
 53/9/3
            (Item 3 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
013711261
             **Image available**
WPI Acc No: 2001-195485/200120
XRPX Acc No: N01-139361
                     only
                            memory with built-in error correcting code,
  Programmable read
 has interruption controller which interrupts detection signal after which
  corrected data is again written into memory cell
Patent Assignee: NEC IC MICROCOMPUTER SYSTEMS LTD (NIDE )
Number of Countries: 001 Number of Patents: 001
Patent Family:
                                           Kind
                                                  Date
                                                           Week
Patent No
              Kind
                     Date
                            Applicat No
                  20010119 JP 99182720
                                                19990629
                                                          200120 B
JP 2001014226 A
                                           Α
Priority Applications (No Type Date): JP 99182720 A 19990629
Patent Details:
Patent No Kind Lan Pg
                        Main IPC
                                    Filing Notes
JP 2001014226 A
                    7 G06F-012/16
Abstract (Basic): JP 2001014226 A
       NOVELTY - An address latch (6) stores address for
    writing-in/reading out of data into/or from memory cell, based on
    which writing-in/reading-out are performed among memory cells. When
    presence of inferior data is read-out from memory cell, error
    detecting signal (12) is generated. Interruption controller interrupts
    detecting signal and correction unit corrects inferior data and writes,
    corrected data into memory cell.
                                         memory ( PROM ) with built-in
        USE - Programmable read
                                  only
    error correcting code ( ECC ).
       ADVANTAGE - As correction unit writes the corrected data again
    into memory cell, after interruption of reduction signal, holder
    for data correction is avoided, and hence reliability is improved.
        DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
   ECC built-in programmable read only
                                            memory .
       Address latch (6)
        Error
                detecting signal (12)
       pp; 7 DwgNo 1/8
Title Terms: PROGRAM; READ; MEMORY; BUILD; ERROR; CORRECT; CODE; INTERRUPT;
  CONTROL; INTERRUPT; DETECT; SIGNAL; AFTER; CORRECT; DATA; WRITING; MEMORY
Derwent Class: T01; U21
International Patent Class (Main): G06F-012/16
International Patent Class (Additional): G06F-011/10
File Segment: EPI
```

Manual Codes (EPI/S-X): T01-G01A1; T01-H01C4; U21-A06

(Item 4 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 013009557 **Image available** WPI Acc No: 2000-181409/200016 XRPX Acc No: N00-133833 Programmable device for prototype system, emulation system of logic debugging complex designs Patent Assignee: ALTERA CORP (ALTE-N) Inventor: NORMAN K A; PATEL R H Number of Countries: 001 Number of Patents: 001 Patent Family: Patent No Kind Date Applicat No Kind Date US 6020758 20000201 US 96615341 19960311 200016 B Α Α Priority Applications (No Type Date): US 96615341 A 19960311 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes US 6020758 Α 8 H03K-019/173 Abstract (Basic): US 6020758 A NOVELTY - Logic components (100) coupled by an interconnecting network, contain memory cells (302) for storing configuration data . A configuration data line couples the memory cells to access transistors (304) forming a serial chain of data transmission. Data injection transistors (308) are respectively coupled to memory cells via partial reconfiguration (PR) data lines (312). USE - For prototype system, emulation system of debugging complex designs and debugging system. ADVANTAGE - Uses improved address wide programming that allows static or dynamic partial reconfiguration without disturbing the design function of the PLD . Provides data injection circuit that enables user to inject data into selected portion of the configuring host without affecting the PLD . Reduces number of data lines since data lines for two adjacent logic components are shared. DESCRIPTION OF DRAWING(S) - The figure shows the alternative architecture drawing of the partially reconfigurable PLD . Logic components (100) Memory cells (302) Access transistors (304) Data injection transistors (308) Partial reconfiguration data lines (312) pp; 8 DwgNo 3/4 Title Terms: PROGRAM; LOGIC; DEVICE; PROTOTYPE; SYSTEM; EMULATION; SYSTEM; DEBUG ; COMPLEX; DESIGN Derwent Class: U21 International Patent Class (Main): H03K-019/173 International Patent Class (Additional): H03K-007/38 File Segment: EPI Manual Codes (EPI/S-X): U21-C01E; U21-C03D 53/9/5 (Item 5 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv.

012923518 **Image available**
WPI Acc No: 2000-095354/200008

XRPX Acc No: N00-120438

Error correcting system in Reed-Solomon encoded data stream

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: COX C E; HASSNER M A

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week 19990222 SG 974048 200008 B SG 60153 Α 19971113 A1 US 6023782 20000208 US 96766681 Α 19961213 200015 Α

Priority Applications (No Type Date): US 96766681 A 19961213

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

SG 60153 A1 42 G06F-011/08

US 6023782 A 20 H03M-013/00

Abstract (Basic): SG 60153 A

NOVELTY - An arithmetic unit iteratively generates intermediate and final values of coefficients of error locator polynomial and an error evaluator polynomial, where the coefficients are stored in random access memory. A control unit controls the arithmetic unit and the memory and detects the completion of the computation of the coefficients.

DETAILED DESCRIPTION - The bidirectional RAM (204) stores signals representing data elements and is coupled to operand register 1 (OP) (208) and multiplexer (MUX) (206) which selects between the output of RAM and OP (208) to determine the input to operand register 2 (OP) (210). The OPs are eight-bit registers with selectable load functions controlled by controller (228). The outputs of the OPs (208,210) are coupled to forcing circuits (212,214), respectively which selectively output either the input data stream or fixed data stream. The output of forcing circuit (212) is coupled to Galois field to multiplier which generates the product of two operands under Galois field. The two operands are supplied by forcing circuit (212) and MUX (220) which selects among the output of forcing circuit (214), output of accumulator (ACC) (222) and output of ROM (226) as controlled by the controller. The output of the multiplier is coupled to adder (202) whose other operand is supplied by the forcing circuit (214). The output of the adder is coupled to RAM and data is input into the RAM when the controller selects the input mode of the RAM. Inverse ROM (226) accepts its input from ACC, stores the data input and outputs the inverse, under the Galois field. The input of ACC is selected by MUX (218) from either output of forcing circuit (214) and adder (216), as controlled by the controller. The adder (216) accepts the output of inverse ROM (226) and output of ACC, as operands. The controller includes a state machine (240) which accepts input, generates output and controls the process. Five counters are used to control the execution flow. KCount (242) tracks the iterations through the main loop of the process. DCount (244) is used to resolve branch conditions in main loop of the process. LCount (246) is used as general loop counter. Shift index (248) outputs the count of shifts of data elements stored in the memory and interleave (250) keeps track of which interleave is being processed. TCount (276) indicates the correction power of the code to the state machine. The input signal start KES (278) initiates the process. Twelve control signals are output from state machine. RAM address (252) is the address into RAM (204) and RAM read (254) causes data element to be output. RAM write (256) causes write cycle to be performed to RAM (204). Load OP1 (258),

load OP2 (260) and load ACC (262) causes OP1 and OP2 and ACC to be loaded, respectively. Force OP1 (204) and force OP2 (266) cause the respective forcing circuits to output predetermined fixed data element. OMuxSelOp1 (268) and AMuxSelOp2 (270) causes the MUX (206) to select input coupled to OP1 (208) to be passed to OP2 (210) and causes the MUX (218) to the input coupled to forcing circuit (214) to be output to accumulator, respectively. MMuxSelOp2 (272) and MMuxSelInv (274) causes the MUX (220) to respectively select the input coupled to forcing circuit (214) and the input coupled to ROM (276) to be output to the multiplier.

USE - For solving key equation to decode the Reed-Solomon encoded data containing errors, used in communication and data storage applications.

ADVANTAGE - Considerable savings in hardware and cost is realized by eliminating the individual registers and storing all the intermediate variables in RAM or register file. Saving is achieved through the elimination of both the registers and the multiplexers to route the register contents to arithmetic units.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the error correcting system and controller.

error correcting system and controller.

Adder 202,216 SRAM 204

MUX 206,218,220

OP 208,210

Forcing circuits 212,214

ACC 222

ROM 226

Controller 228

Counters 242,244,246,276,278

Index shift 248

Interleave 250

Control signals 252,254,256,258,260,262,264,266,268,270,272,274

Dwg.2a,2b/

3

US 6023782 A

NOVELTY - An arithmetic unit iteratively generates intermediate and final values of coefficients of error locator polynomial and an evaluator polynomial, where the coefficients are stored in random access memory. A control unit controls the arithmetic unit and the memory and detects the completion of the computation of the coefficientsDETAILED DESCRIPTION - The bidirectional RAM (204) stores signals representing data elements and is coupled to operand register 1 (OP) (208) and multiplexer (MUX) (206) which selects between the output of RAM and OP (208) to determine the input to operand register 2 (OP) (210). The OPs are eight-bit registers with selectable load functions controlled by controller (228). The outputs of the OPs (208,210) are coupled to forcing circuits (212,214), respectively which selectively output either the input data stream or fixed data stream. The output of forcing circuit (212) is coupled to Galois field to multiplier which generates the product of two operands under Galois field. The two operands are supplied by forcing circuit (212) and \mbox{MUX} (220) which selects among the output of forcing circuit (214), output of accumulator (ACC) (222) and output of ROM (226) as controlled by the controller. The output of the multiplier is coupled to adder (202) whose other operand is supplied by the forcing circuit (214). The output of the adder is coupled to RAM and data is input into the RAM when the controller selects the input mode of the RAM. Inverse ROM (226) accepts its input from ACC, stores the data input and outputs the inverse, under the Galois field. The input of ACC is selected by MUX (218) from either output of forcing circuit (214) and adder (216), as controlled by the controller. The adder (216) accepts the output of

inverse ROM (226) and output of ACC, as operands. The controller includes a state machine (240) which accepts input, generates output and controls the process. Five counters are used to control the execution flow. KCount (242) tracks the iterations through the main loop of the process. DCount (244) is used to resolve branch conditions in main loop of the process. LCount (246) is used as general loop counter. Shift index (248) outputs the count of shifts of data stored in the memory and interleave (250) keeps track of which interleave is being processed. TCount (276) indicates the correction power of the code to the state machine. The input signal start KES (278) initiates the process. Twelve control signals are output from state machine. RAM address (252) is the address into RAM (204) and RAM read (254) causes data element to be output. RAM write (256) causes write cycle to be performed to RAM (204). Load OP1 (258), load OP2 (260) and load ACC (262) causes OP1 and OP2 and ACC to be loaded, respectively. Force OP1 (204) and force OP2 (266) cause the respective forcing circuits to output predetermined fixed data element. OMuxSelOp1 (268) and AMuxSelOp2 (270) causes the MUX (206) to select input coupled to OP1 (208) to be passed to OP2 (210) and causes the MUX (218) to the input coupled to forcing circuit (214) to be output to accumulator, respectively. MMuxSelOp2 (272) and MMuxSelInv (274) causes the MUX (220) to respectively select the input coupled to forcing circuit (214) and the input coupled to ROM (276) to be output to the multiplier.

USE - For solving key equation to decode the Reed-Solomon encoded data containing errors, used in communication and data storage applications.

ADVANTAGE - Considerable savings in hardware and cost is realized by eliminating the individual registers and storing all the intermediate variables in RAM or register file. Saving is achieved through the elimination of both the registers and the multiplexers to route the register contents to arithmetic units.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the error correcting system and controller.

Adder 202,216 **SRAM 204** MUX 206,218,220 OP 208,210 Forcing circuits 212,214 ACC 222 **ROM** 226 Controller 228 Counters 242,244,246,276,278 Index shift 248 Interleave 250 Control signals 252,254,256,258,260,262,264,266,268,270,272,274 Dwg.2a,2b/ Title Terms: ERROR; CORRECT; SYSTEM; REED; ENCODE; DATA; STREAM

Derwent Class: T01; T03; U21

International Patent Class (Main): G06F-011/08; H03M-013/00

File Segment: EPI

Manual Codes (EPI/S-X): T01-D01; T01-G01A; T01-S01B; T03-A08A1C; T03-N01; T03-P01A; U21-A06

53/9/6 (Item 6 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv.

011606826 **Image available** WPI Acc No: 1998-023954/199803

XRPX Acc No: N98-018496

Memory holder device for TV - has EEPROM in which mirror image data is

used for detecting and correcting errors in stored data

Patent Assignee: FUJITSU GENERAL LTD (GENH) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 9282237 A 19971031 JP 9697937 A 19960419 199803 B

Priority Applications (No Type Date): JP 9697937 A 19960419

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 9282237 A 5 G06F-012/16

Abstract (Basic): JP 9282237 A

The device includes a micro computer (3) which receives data from a remote control (1) and are written to an EEPROM (2) based on a write-in controller (4a). The mirror image data are formed with stored data and checksum of stored data. The stored data and checksum are read from the EEPROM to micro computer based on read-out controller (4b). A main body with the mirror image data in the EEPROM detects and corrects errors in stored data.

ADVANTAGE - Provides normal data and operation, reduces EEPROM frequency, prolongs life of EEPROM, prevents malfunctioning by errors.

Dwg.1/3

Title Terms: MEMORY; HOLD; DEVICE; TELEVISION; EEPROM; MIRROR; IMAGE;

DATA; DETECT; CORRECT; ERROR; STORAGE; DATA

Derwent Class: T01; U13; U14; U21

International Patent Class (Main): G06F-012/16

International Patent Class (Additional): G06F-011/10; G11C-029/00

File Segment: EPI

Manual Codes (EPI/S-X): T01-G01A1; T01-H01C4; U13-C04B2; U14-A03B7; U14-D01B; U21-A06

53/9/7 (Item 7 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

011516105 **Image available** WPI Acc No: 1997-492591/199746

XRPX Acc No: N97-410037

Digital signal error detector for verifying operation of digital equipment - has comparator to which signal difference value signal and specified threshold value from limit register are input for generating error

Patent Assignee: TEKTRONIX INC (TEKT)

Inventor: ELKIND B

Number of Countries: 004 Number of Patents: 006

Patent Family:

racenc ramily:							
Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2312534	Α	19971029	GB 977988	Α	19970421	199746	В
DE 19714976	A1	19971030	DE 1014976	A	19970410	199749	
JP 10097439	Α	19980414	JP 97106186	Α	19970423	199825	
US 5832003	Α	19981103	US 96638057	A	19960425	199851	
US 6119258	Α	20000912	US 96638057	Α	19960425	200046	
			US 9847979	Α	19980325		
GB 2312534	В	20010110	GB 977988	Α	19970421	200103	

```
Priority Applications (No Type Date): US 96638057 A 19960425; US 9847979 A
  19980325
Patent Details:
Patent No Kind Lan Pg
                         Main IPC
                                     Filing Notes
                    17 G06F-007/64
GB 2312534
              Α
DE 19714976
              A1
                     6 H04L-001/24
JP 10097439
              Α
                     4 G06F-011/00
US 5832003
              Α
                       G06F-011/00
US 6119258
              Α
                       G01R-031/28
                                     Cont of application US 96638057
                                     Cont of patent US 5832003
GB 2312534
              R
                       G06F-007/64
Abstract (Basic): GB 2312534 A
        The detector includes a difference generator (14) for producing a
    signal difference value signal from a repetitive input data signal and
    a reference data signal. A limit detector to which the signal
    difference value signal is input for generating an error signal when
    the signal difference value signal exceeds a specified threshold value.
    The limit detector (32) includes a limit register for storing the
    specified threshold value . A comparator (34) is provided to which the
    signal difference value signal and the specified threshold value from
    the limit register are input for generating the error signal when the
    signal difference value signal exceeds the specified threshold value.
        A maximum register (16) stores a maximum threshold value as
    part of the specified threshold value. A minimum register (18) stores
    a minimum threshold value as part of the specified threshold value.
        USE/ADVANTAGE - For processing PAL composite signals,
    compressed signals or non-losses processed signals. Allows evaluating
    whether equipment is operating within acceptable margins of error or is
    seriously malfunctioning.
        Dwg.1/1
Title Terms: DIGITAL; SIGNAL; ERROR; DETECT; VERIFICATION; OPERATE; DIGITAL
  ; EQUIPMENT; COMPARATOR; SIGNAL; DIFFER; VALUE; SIGNAL; SPECIFIED;
  THRESHOLD; VALUE; LIMIT; REGISTER; INPUT; GENERATE; ERROR
Derwent Class: T01; W02; W04
International Patent Class (Main): G01R-031/28; G06F-007/64; G06F-011/00;
  H04L-001/24
International Patent Class (Additional): H04L-001/00; H04L-012/26;
  HO4N-007/24; HO4N-009/64; HO4N-017/00
File Segment: EPI
Manual Codes (EPI/S-X): T01-J08F; W02-F04A1; W02-F04A5; W04-P01A
            (Item 8 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
011030909
             **Image available**
WPI Acc No: 1997-008833/199701
XRPX Acc No: N97-008044
 Microcomputer-controller data
                                  storage method for e.g. rice cooker,
                                           stored in RAM into
  air conditioner - involves writing data
  electrically-erasable-programmable ROM only if power-failure signal is
  released by power- failure
                               detector
Patent Assignee: RINNAI CORP (RINN )
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No
              Kind
                     Date
                             Applicat No
                                            Kind
                                                   Date
JP 8278923
                   19961022
               Α
                             JP 9578966
                                             Α
                                                 19950404
                                                           199701 B
```

Priority Applications (No Type Date): JP 9578966 A 19950404 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes JP 8278923 5 G06F-012/16 Α Abstract (Basic): JP 8278923 A The method begins by connecting a power-supply plug to a power-supply terminal (10) of a micro computer (1) to charge a back-up power supply unit (32). A power-failure detector (31) releases a power-failure signal during power failure. The data to be written in a electrically-erasable-programmable ROM (12) of the microcomputer is stored in a RAM (13). The data in the RAM is written to the **EEPROM** only if the power-failure signal detector . is released from the power- failure ADVANTAGE - Ensures utilisation of EEPROM for long time due to reduced data write-in frequency in EEPROM . Dwq.1/2 Title Terms: MICROCOMPUTER; CONTROL; DATA; STORAGE; METHOD; RICE; COOKER; AIR; CONDITION; WRITING; DATA; STORAGE; RAM; ELECTRIC; ERASE; PROGRAM; ROM ; POWER; FAIL; SIGNAL; RELEASE; POWER; FAIL; DETECT Derwent Class: P28; T01; X27 International Patent Class (Main): G06F-012/16 International Patent Class (Additional): A47J-027/00 File Segment: EPI; EngPI Manual Codes (EPI/S-X): T01-G03; T01-H01C4; T01-J08A; X27-C04; X27-E01B (Item 9 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 010862928 **Image available** WPI Acc No: 1996-359879/199636 XRPX Acc No: N96-303425 Test data generation circuit for integrated circuit memory e.g. EEPROM , FLASHROM, SRAM - converts data signal output from test data memory to exclusive OR or its negative value with higher-order initial address message, from initial address message input through address line of test memory Patent Assignee: MITSUBISHI PLASTICS IND LTD (MISD) Number of Countries: 001 Number of Patents: 001 Patent Family: Applicat No Kind Date Week Patent No Kind Date 19960702 JP 94313495 19941216 199636 B JP 8171518 Α Α Priority Applications (No Type Date): JP 94313495 A 19941216 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes

Abstract (Basic): JP 8171518 A

Α

9 G06F-012/16

JP 8171518

The generation circuit has a test data memory (1) that stores a test data. A data signal output from the test data memory is converted to an exclusive OR or its negative value with a higher-order initial address message from an initial address message input through an address line of the test data memory, and is stored in a tested memory (2). The data read from the tested memory is compared with the converted data.

An abnormality is judged in the memory when the comparison data

are not the same. The higher order initial address message is input into a third memory from the initial address message input into the address line of the test data memory. The data stored previously is output. The data signal output from the test data memory is converted to the exclusive OR or its negative value with a data output from the third memory.

ADVANTAGE - Reduced mfg. cost and size. **Decreases** capacity of test data memory. Enables detection of memory abnormality.

Dwq.3/15

Title Terms: TEST; DATA; GENERATE; CIRCUIT; INTEGRATE; CIRCUIT; MEMORY; EEPROM; SRAM; CONVERT; DATA; SIGNAL; OUTPUT; TEST; DATA; MEMORY; EXCLUDE; NEGATIVE; VALUE; HIGH; ORDER; INITIAL; ADDRESS; MESSAGE; INITIAL; ADDRESS; MESSAGE; INPUT; THROUGH; ADDRESS; LINE; TEST; DATA; MEMORY

Derwent Class: T01

International Patent Class (Main): G06F-012/16

International Patent Class (Additional): G06F-011/22

File Segment: EPI

Manual Codes (EPI/S-X): T01-G02A2D; T01-H01

53/9/10 (Item 10 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010836641 **Image available**
WPI Acc No: 1996-333594/199633
Related WPI Acc No: 1996-041843

XRPX Acc No: N96-281184

Communication method for transferring data from mass storage device, e.g. CD- ROM to host computer - storing separated sectors of user and auxiliary data in contiguous memory blocks and performing error correction on all desired sectors before transferring to host computer via communications bus

Patent Assignee: OAK TECHNOLOGY INC (OAKT-N)

Inventor: VERINSKY P; WEDDLE G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Kind Patent No Date Applicat No Kind Date Week US 5535327 19960709 US 94264600 Α 19940623 199633 B Α US 95505557 19950721 Α

Priority Applications (No Type Date): US 95505557 A 19950721; US 94264600 A 19940623

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5535327 A 14 G06F-011/10 CIP of application US 94264600

Abstract (Basic): US 5535327 A

The communication method involves reading a sector of user data from a mass storage device, e.g. a CD- ROM drive, separating the user data from the auxiliary data and storing each portion in a separate contiguous memory block. Error detection and correction is performed on the data which is then labelled with a block address.

Further sectors are read and processed in the same way until all the desired data has been transferred to memory blocks, using a different label for each sector. The error corrected user data is then transferred, over a communications bus, to a host computer. Pref. the auxiliary data read from the mass storage device is stored in the same memory block, replacing the previous auxiliary data block.

ADVANTAGE - Reduces amount of address storage required to locate

valid data blocks in DRAM. Reduces execution time required by system controller to address each user data block.

Dwg.2/5

Title Terms: COMMUNICATE; METHOD; TRANSFER; DATA; MASS; STORAGE; DEVICE; CD; ROM; HOST; COMPUTER; STORAGE; SEPARATE; SECTOR; USER; AUXILIARY; DATA; CONTIGUOUS; MEMORY; BLOCK; PERFORMANCE; ERROR; CORRECT; SECTOR;

TRANSFER; HOST; COMPUTER; COMMUNICATE; BUS

Index Terms/Additional Words: COMPACT; DISC; DRIVE

Derwent Class: T01; T03

International Patent Class (Main): G06F-011/10

International Patent Class (Additional): G06F-003/08; G11B-021/10

File Segment: EPI

Manual Codes (EPI/S-X): T01-C01; T01-G01A; T03-B08; T03-N01

53/9/11 (Item 11 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010742106 **Image available**
WPI Acc No: 1996-239061/199624
Related WPI Acc No: 1994-341271

XRPX Acc No: N96-200133

Flash EEPROM - has data controller contg. 2nd non-volatile memory for storing block bit map table corresp. to flash EEPROM block, and 3rd non-volatile memory for storing alternate address when redundant flash EEPROM is defective

Patent Assignee: HITACHI LTD (HITA)

Inventor: FUJITA K; NAKAO T; SAZE N; YAMAGATA H Number of Countries: 001 Number of Patents: 001

Patent Family:

Applicat No Kind Date Week Patent No Kind Date US 5515333 19960507 US 92968334 Α 19921029 199624 B Α US 94262314 Α 19940617

Priority Applications (No Type Date): JP 91282695 A 19911029

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5515333 A 10 G06F-011/00 Div ex application US 92968334 Div ex patent US 5359569

Abstract (Basic): US 5515333 A

The semiconductor memory includes an electrically rewritable non-volatile semiconductor **memory**. A **data** control circuit includes an **ECC** circuit and controls the writing and reading operations of data to and from the non-volatile semiconductor memory.

In order to temporarily hold data which is to written into the non-volatile semiconductor memory, a volatile cache semiconductor memory is used. This volatile cache semiconductor memory has a storage capacity which is equal to or less than the storage capacity of the non-volatile semiconductor memory itself. A data control circuit is also provided to read out data from the non-volatile semiconductor memory and the volatile cache semiconductor memory, and to transfer the data from the volatile semiconductor to the non-volatile semiconductor memory.

ADVANTAGE - Improved efficiency and life, low cost and high data access speed. Decreases number of commands of combining small data volumes in data write operation. Data re-writing separation can be executed at high speed without knowledge of block as rewriting unit of data.

Dwg.1,5/9

Title Terms: FLASH; EEPROM; DATA; CONTROL; CONTAIN; NON; VOLATILE; MEMORY; STORAGE; BLOCK; BIT; MAP; TABLE; CORRESPOND; FLASH; EEPROM; BLOCK; NON; VOLATILE; MEMORY; STORAGE; ALTERNATE; ADDRESS; FLASH; EEPROM; DEFECT

Derwent Class: T01; U14

International Patent Class (Main): G06F-011/00

File Segment: EPI

Manual Codes (EPI/S-X): T01-G03; T01-H01B3; T01-H03A; U14-A07

53/9/12 (Item 12 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010691059 **Image available**
WPI Acc No: 1996-188015/199619

Related WPI Acc No: 1993-405247; 1995-115083

XRPX Acc No: N96-157311

Determining encoding scheme in mixed data encoding scheme for programming data into sector of flash EEPROM system - encoding and storing ECC for part of data, retrieving part of data and ECC by assuming either data encoding, decoding ECC and determining data in group has been programmed using assumed data encoding when ECC error is absent

Patent Assignee: SANDISK CORP (SAND-N)

Inventor: GROSS S J; GUTERMAN D C; HARARI E; MEHROTRA S; NORMAN R D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 5504760 19960402 US 91670246 Α 19910315 199619 B Α US 93148930 Α 19931108

Priority Applications (No Type Date): US 93148930 A 19931108; US 91670246 A 19910315

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5504760 A 26 G06F-011/10 CIP of application US 91670246 CIP of patent US 5270979

Abstract (Basic): US 5504760 A

An array of EEPROM memory cells are organised into groups of cells, each group having data programmed according to either first data encoding or a second data encoding. The first data encoding has 1st and 2nd logical states of data represented respectively by the erased state and the programmed state. The second data encoding has the representations of the first and second logical states reversed relative to the programmed and erased states of the first data encoding.

In a read operation on a group, it is determined whether the data has been programmed according to the 1st or the 2nd data encoding. When data is programmed into the group, an error correction code (''ECC'') is encoded and stored for part of the data.

In a subsequent read operation on the group, the part of the data and the ECC are retrieved by assuming either the first or the second data encoding. The ECC is decoded for the part of the data. It is determined that the data in the group has been programmed using the assumed data encoding when a first condition is true that an ECC error is absent.

ADVANTAGE - Improves performance of erasing and programming of

EEPROM system, while minimising stress and maximising performance,
 maintaining optimum erase parameters during history of EEPROM
 program-erase cycling.
 Dwg.14a/15
Title Terms: DETERMINE; ENCODE; SCHEME; MIX; DATA; ENCODE; SCHEME; PROGRAM;

Title Terms: DETERMINE; ENCODE; SCHEME; MIX; DATA; ENCODE; SCHEME; PROGRAM; DATA; SECTOR; FLASH; EEPROM; SYSTEM; ENCODE; STORAGE; ECC; PART; DATA; RETRIEVAL; PART; DATA; ECC; ASSUME; DATA; ENCODE; DECODE; ECC; DETERMINE; DATA; GROUP; PROGRAM; ASSUME; DATA; ENCODE; ECC; ERROR; ABSENCE

Derwent Class: T01; U13; U14

International Patent Class (Main): G06F-011/10

File Segment: EPI

Manual Codes (EPI/S-X): T01-D02; T01-G01A; U13-C04B2; U14-D02

53/9/13 (Item 13 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010356179 **Image available**
WPI Acc No: 1995-257493/199534

Memory module for extension for image processing part of high quality printer - has two 16M ROMs and multiple 4M DRAMs which are mounted on same substrate

Patent Assignee: CANON KK (CANO)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 7160384 A 19950623 JP 93338790 A 19931202 199534 B

Priority Applications (No Type Date): JP 93338790 A 19931202 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes JP 7160384 A 4 G06F-003/00

Abstract (Basic): JP 7160384 A

The memory module consists of two 16M ${\bf ROMs}$ (31a, 31b) and multiple 4M DRAMs (22 - 29) mounted on same surface. In the ${\bf ROMs}$ control programmes are stored. The specification of the image processing part and the connector part (21) of the extension memory module is same as that of the specification of the connector of the 72-pin DRAM module defined by ${\bf JEDEC}$.

USE/ADVANTAGE - In e.g. printer of laser beam system. Plans miniaturisation of image processing part and curtailment of electronic components.

Dwg.1/4

Title Terms: MEMORY; MODULE; EXTEND; IMAGE; PROCESS; PART; HIGH; QUALITY; PRINT; TWO; ROM; MULTIPLE; MOUNT; SUBSTRATE

Index Terms/Additional Words: MEMORY; MODULE; EXTEND; IMAGE; P

Derwent Class: T01; T04

International Patent Class (Main): G06F-003/00

International Patent Class (Additional): G06F-012/00; G11C-005/00

File Segment: EPI

Manual Codes (EPI/S-X): T01-H01B1; T04-G04A

53/9/14 (Item 14 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

009325831 **Image available**
WPI Acc No: 1993-019294/199303

XRPX Acc No: N93-014792

Error correction system for semiconductor memory - uses syndrome signal to provide correction signal for each stored data group

Patent Assignee: MITSUBISHI DENKI KK (MITQ); MITSUBISHI ELECTRIC CORP

Inventor: KOHDA K; MAKIHARA H

Number of Countries: 004 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4220196	A1	19930114	DE 4220196	A	19920619	199303	В
JP 5002898	A	19930108	JP 91151809	Α	19910624	199306	
US 5383205	Α	19950117	US 92894661	Α	19920605	199509	
DE 4220196	C2	19950406	DE 4220196	Α	19920619	199518	
KR 9510311	B1	19950914	KR 9210893	Α	19920623	199846	

Priority Applications (No Type Date): JP 91151809 A 19910624

Patent Details:

```
Patent No Kind Lan Pg
                          Main IPC
                                       Filing Notes
                     35 G11C-029/00
 DE 4220196
               A1
 US 5383205
                     33 G06F-011/10
               Α
 DE 4220196
               C2
                     35 G11C-029/00
· JP 5002898
               Α
                         G11C-029/00
 KR 9510311
                         G11C-029/00
               B1
```

Abstract (Basic): DE 4220196 A

The error correction system uses a correction circuit for error correction via Hamming matrix operation. Each **memory field** holds quantity of data divided into 2 data groups and priority data, used with these data groups to provide syndrome signals via a syndrome signal generator.

A correction signal generator sequentially provides correction signals for the two data groups in synchronism with the operation of a data group selector, in response to the supplied syndrome signal, with corresponding correction of the **stored data** via a **data** correction stage.

USE - For **read only** semiconductor **memory**. Dwg.1/22

Abstract (Equivalent): DE 4220196 C

The semiconductor device has a memory cell field (1,2) with stored data (do-d31) and also parity data (PO-P5), a unit (8) for reading data from the cells, a unit (11) for correcting an error in the data and an operation corresponding to a pre-determined Hamming matrix is applied to the data.

The data (dO-d31) in the unit (110 is divided uniformly into two halves (do-d15; d16-d31), forming two groups. This unit contains a unit for producing a number of syndrome signals on the basis of the two groups and the parity data, a group selector unit, a correction signal producing unit and finally a data correcting unit.

USE/ADVANTAGE - Suitable for semiconductor memorised. Employs Hamming matrix for correcting data, reducing size of correction circuit.

Dwg.1/22

Abstract (Equivalent): US 5383205 A

The mask ROM has an ECC (error correction circuit) for carrying out operation according to a Hamming matrix in which all but 2 of 6 elements in one column and the other column match each other. The columns correspond to 32 data that will be provided to an external source, and the one column corresponds to the other column by 16

columns.

The ECC is implemented so that one half of 32 correction signals with which exclusive ORs are to be taken with 32 data, are generated by a circuit identical to that of a circuit for generating the other half of the 32 correction signals; and the circuit for taking the exclusive ORs from one half of the 32 data and the corresponding correction signals can be used for taking exclusive ORs from the remaining half of the 32 data and the corresponding correction signals.

ADVANTAGE - Number of component elements for correction signal generator and for data correction circuit, and number of input signal lines to data correction circuit are reduced to half, alleviating circuit complexity of entire ECC in comparison with that of conventional one.

Dwg.1,2/22

Title Terms: ERROR; CORRECT; SYSTEM; SEMICONDUCTOR; MEMORY; SYNDROME; SIGNAL; CORRECT; SIGNAL; STORAGE; DATA; GROUP

Derwent Class: U14

International Patent Class (Main): G06F-011/10; G11C-029/00

International Patent Class (Additional): G06F-012/16; H01L-027/10

File Segment: EPI

Manual Codes (EPI/S-X): U14-D02

53/9/15 (Item 15 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

007288809

WPI Acc No: 1987-285816/198741

XRPX Acc No: N87-214223

Encoder and error corrector for BCH code - delays input data while syndrome computer and ROM develop correcting pulse for injection on timed release

Patent Assignee: KENWOOD KK (TRIR) Inventor: KOBAYASHI H; SHIRAISHI K

Number of Countries: 002 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 240921	Α	19871014	EP 87104823	Α	19870401	198741	В
JP 62233932	Α	19871014	JP 8675549	Α	19860403	198747	
EP 240921	В1	19940727	EP 87104823	Α	19870401	199429	
DE 3750269	G	19940901	DE 3750269	Α	19870401	199434	
			EP 87104823	Α	19870401		

Priority Applications (No Type Date): JP 8675549 A 19860403 Cited Patents: A3...8917; No-SR.Pub; US 3714629; US 4107652; 01Jnl.Ref Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 240921 A E 13

Designated States (Regional): DE B1 E 7 H03M-013/00 Designated States (Regional): DE

DE 3750269 H03M-013/00 Based on patent EP 240921

Abstract (Basic): EP 240921 A

Input data applied to the coder is delayed ina shift register (2) whilst simultaneously processed in a syndrome computer (1) to identify errors . The resulting computer output is latched (3) and applied as an address to a ROM (4) which stores error position data . From the ROM (4), the resulting output is handled by an up-counter unit

(5), under control of a timing generator (7), which initiates a count to a preset level. At this level, a ripple carry is executed and is used as an error correcting signal.

Timing of the up-counter (5) operation is synchronised by the timing generator (7) with the release of the input data held in the delay register (2). Both signals are applied to an EXOR gate (6) so that its **encoded data** output is corrected by injection of the ripple carry pulse at the appropriate point.

ADVANTAGE - Post - ${\it ROM}$ circuitry is simpler, and medium scale integration is therefore simplified.

Abstract (Equivalent): EP 240921 B

A BCH code signal correcting system including means (1, 3, 4) for generating error position data derived from a syndrome in an input BCH code signal, and correction means (6) for correcting the error in the input code signal; wherein the input code signal data are further processed in a serial bit stream; the correcting system comprising means (5, 7) responsive to the error position data for producing a timing signal in dependence on a time interval between the error position and a reference position in the input BCH code signal; and means (2) for delaying the input BCG code signal so that said timing signal timely corresponds to the error position in the delayed input BCH code signal; wherein said correction means (6) is responsive to the timing signal and the delayed input code signal for correcting the error in the delayed input code signal; characterised in that said error position generating means (1, 3, 4) includes memory means (4) for storing error position binary code data addressed by the syndrome in the input BCH code signal, and said timing signal producing means (5, 7) includes a counter (5) responsive to a load signal for being preset by the error position binary code data read out from said memory means (4) and responsive to a clock signal for counting until a reference count to produce the timing signal; said timing signal being a carry signal.

(Dwg.1/2f)

Title Terms: ENCODE; ERROR; CORRECT; BCH; CODE; DELAY; INPUT; DATA; SYNDROME; COMPUTER; ROM; DEVELOP; CORRECT; PULSE; INJECTION; TIME; RELEASE

Index Terms/Additional Words: BOSE

Derwent Class: T01; U21

International Patent Class (Main): H03M-013/00

International Patent Class (Additional): G06F-011/10

File Segment: EPI

Manual Codes (EPI/S-X): T01-G01; U21-A06

53/9/16 (Item 16 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

004250916

WPI Acc No: 1985-077794/198513

Compact hybrid integrated circuit device increasing packing density - has UV- EPROM and other element hybridised to use package standardised by JEDEC without UV rays blocking seal NoAbstract Dwg 2/5

Patent Assignee: TOSHIBA KK (TOKE)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 60030171 A 19850215 JP 83138477 A 19830728 198513 B

Priority Applications (No Type Date): JP 83138477 A 19830728

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 60030171 A 3

Title Terms: COMPACT; HYBRID; INTEGRATE; CIRCUIT; DEVICE; INCREASE; PACK; DENSITY; ULTRAVIOLET; EPROM; ELEMENT; HYBRID; PACKAGE; STANDARD;

ULTRAVIOLET; RAY; BLOCK; SEAL; NOABSTRACT

Derwent Class: U14

International Patent Class (Additional): H01L-027/10

File Segment: EPI

Manual Codes (EPI/S-X): U14-A06A; U14-H03

53/9/17 (Item 17 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

004246043

WPI Acc No: 1985-072921/198512

XRPX Acc No: N85-054381

Logic circuit prodn. flaws automatic search appts. - has controlled pre-analyser with outputs to data memory and to points switch connected to circuit on test

Patent Assignee: VINNITSK POLY (VINN-R); VINNITSK TERMINAL (VINN-R)

Inventor: BAIDA N P; SEMERENKO V P; SHPILEVOI V T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week SU 1108451 A 19840815 SU 3480480 A 19820811 198512 B

Priority Applications (No Type Date): SU 3480480 A 19820811

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

SU 1108451 A 30

Abstract (Basic): SU 1108451 A

The appts. contg. a memory with address selector (2), output signal discriminator (7), comparator (11), and a control circuit, has a points switch (4), initial condition (5), compressed standard signal (9) and compressed output signal (10) registers, pre-analyser (6), compressed data read - only memory (10), text rendition unit (12), modulo-2 adder (13) and the Start button (16), and the control circuit (15) is reconstructed.

Test points of the logic circuit (18) on test are connected cyclically by the points switch. Logical constants of initial conditions are sotred during the test. The pre-analyser contains seven counters, three comparators and other parts for **checking** on non-logical **flaws** since the circuit on test has a limited number of components, less memory capacity is required to store tests for the individual components than a memory storing a full test for all the logic circuit.

USE/ADVANTAGE - In prodn. testing of assembled printed units contg. digital integrated circuits, all the non-logical flaws are eliminated before rated voltage is applied to search for logical flaws, so ensuring non-destructive testing and widening the field of application. A search is made for faults in greater depth and a memory of less capacity can be used. Bul.30/15.8.84. (30pp Dwg.No.1/11)

Title Terms: LOGIC; CIRCUIT; PRODUCE; FLAW; AUTOMATIC; SEARCH; APPARATUS; CONTROL; PRE; ANALYSE; OUTPUT; DATA; MEMORY; POINT; SWITCH; CONNECT; CIRCUIT; TEST

Derwent Class: S01; T01; U11

International Patent Class (Additional): G06F-011/00

File Segment: EPI

Manual Codes (EPI/S-X): S01-G01A; T01-G02; U11-F01D

53/9/18 (Item 18 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

06354785 **Image available**

1 CHIP MICROCOMPUTER

PUB. NO.: 11-296392 [JP 11296392 A] PUBLISHED: October 29, 1999 (19991029)

INVENTOR(s): FUKUSHIMA KIYOSHI

APPLICANT(s): NEC CORP

APPL. NO.: 10-097287 [JP 9897287] FILED: April 09, 1998 (19980409)

INTL CLASS: G06F-011/10; G06F-012/16; G06F-015/78

ABSTRACT

PROBLEM TO BE SOLVED: To provide a 1 chip microcomputer for reducing the work load on a user at the time of preparing ECC (error collection code) data, preventing increase of an EEPROM (electrical erasable programmable read only memory) writing time based on the ECC data, and reducing a memory capacity.

SOLUTION: This 1 chip microcomputer is provided with a firm ROM 5 for storing a program for generating ECC data from user data and an EEPROM control circuit 7 for controlling wiring of user data and the ECC data in an EEPROM 8. A CPU 2 stores the ECC data generated by the program of the firm ROM 5 from the user data and the original user data in a user data area 83 and an ECC data area 84 of the EEPROM 8 according to the control of the EEPROM control circuit 7, and reads the user data in the user data area 83 and the ECC data in the ECC data area 84 for successively operating an error correction processing.

COPYRIGHT: (C) 1999, JPO

53/9/19 (Item 19 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

06341107 **Image available**

DEVELOPMENT SUPPORTING DEVICE FOR SOFTWARE

PUB. NO.: 11-282711 [JP 11282711 A] PUBLISHED: October 15, 1999 (19991015)

INVENTOR(s): TAKAMATSU SHIRO

APPLICANT(s): TOSHIBA MICROELECTRONICS CORP

TOSHIBA CORP

APPL. NO.: 10-081649 [JP 9881649] FILED: March 27, 1998 (19980327) INTL CLASS: G06F-011/22; G06F-011/28

ABSTRACT

PROBLEM TO BE SOLVED: To enable a **debug** to restart from a state in which a power source is disconnected, to eliminate a limit of the number of **data** writing and to **reduce** a time needed for loading data.

SOLUTION: This development supporting device 11 for software is equipped with an emulation memory part 14 for emulating an EEPROM 12c built in a micro controller unit 12, and an emulation memory part 14 is composed of an SRAM 14c for storing data which are to be written into the EEPROM 12c, a timer 14f for making a busy time which generates at the time of writing into the EEPROM 12c and a power source backup circuit 14a for storing the data in the SRAM 14c. According to this structure, since the data of the SRAM 14c are retained even after the power source is disconnected, the debug can be easily restarted from the state at the time of power source disconnection.

COPYRIGHT: (C) 1999, JPO

53/9/20 (Item 20 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

03982651 **Image available**
SEMICONDUCTOR MEMORY DEVICE

PUB. NO.: 04-347751 [JP 4347751 A] PUBLISHED: December 02, 1992 (19921202)

INVENTOR(s): ENDO KANICHI

APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese

Company or Corporation), JP (Japan)

APPL. NO.: 03-120418 [JP 91120418] FILED: May 24, 1991 (19910524)

INTL CLASS: [5] G06F-012/16; G06F-011/10

JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.1

(INFORMATION PROCESSING -- Arithmetic Sequence Units)

JOURNAL: Section: P, Section No. 1525, Vol. 17, No. 207, Pg. 72, April

22, 1993 (19930422)

ABSTRACT

PURPOSE: To supply a semiconductor memory device where a product code error correction circuit with comparatively low correction capacity and a humming code error correction circuit are combined, in which correction capacity more than two bit errors without using the error pattern retrieval operation of ROM or the like is realized, and the amount of hardware can be reduced.

CONSTITUTION: In the semiconductor memory device which accumulates information data and parity data, which has a memory array consisting of plural memory cells and plural work lines, which corrects oneself with information data outputted an arbitrary bit line by the selected word line and parity data, a humming encoding /decoding circuit which accumulates information data as holding data, humming code parity data and product code parity data in the memory array, and which individually error detects parallel or serial output data from the memory array, the product encoding/decoding circuit, and the error correction circuit which refers to detection data of the humming encoding / decoding circuit and the product encoding/decoding circuit, corrects the error and outputs the error to an external part are provided.

63/9/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

013873842 **Image available**
WPI Acc No: 2001-358054/200138

XRPX Acc No: N01-260249

Estimation method for relationship between control parameters in digital data compression system, involves estimating adaptive filter parameters in parametric model and providing compensation

Patent Assignee: CANON KK (CANO)

Inventor: NGUYEN E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Priority Applications (No Type Date): FR 997547 A 19990615

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

FR 2795276 A1 28 H04N-007/50

Abstract (Basic): FR 2795276 A1

NOVELTY - The method of estimation of a relationship between the control parameters of a system for the **compression** of digital **data** representative of physical quantities and the quantities characterizing the system performance includes an estimation of the parameters of parametric affine model by adaptive filtering. The breakdown of a model is detected by measurement of filter innovations and the detection of variations of the innovations. The model parameters are compensated when the variations are greater than a predetermined threshold. The adaptive filtering is a Recursive Least Square (RLS) filtering. The detection and the compensation are effected by use of the Generalized Likelihood Ratio (GLR).

DETAILED DESCRIPTION - The system quantities include the rate of coded data, and the control parameters are determined for the system providing a predetermined rate or distortion. The system quantities include the distortion of coded data, and the control parameters are determined for the system providing predetermined rate of distortion. A device for an estimation of the relationship between the control parameters and the quantities characterizing the system performance comprises the means for the estimation of parameters of parametric affine model by adaptive filtering, the means for the detection of breakdown of model by measuring the filter innovations and the detection of variations of the innovations, and the means for the compensation of model parameters when the variations are greater than a predetermined threshold. The means for estimation, detection and compensation include a microprocessor, e.g. central processing unit (CPU), a read - only memory (ROM) storing a program for signal compression, and a random access memory (RAM) containing data registers adapted to register the variables modified in the course of program execution. INDEPENDENT CLAIMS are included for an estimation device, and for a digital device comprising the estimation device.

USE - In systems with digital data compression, where a control is required to find a compromise between the rate and the distortion; in methods and devices for a robust control of digital data compression with losses; for use in systems for video or acoustic

signal processing, in conjunction with digital camera, photographic apparatus, or scanner, or in acoustic case with microphone.

ADVANTAGE - Enables finding the control parameters for the required rate or distortion. The estimation of rate-distortion performance is carried out on line, on the basis of periodically measured values. The system includes a refined stage of model updating.

DESCRIPTION OF DRAWING(S) - The drawing shows a flow chart for an algorithm for digital **data compression** and estimation of rate-distortion relationship. (Drawing contains non-English language text)

Initialization (E1)
Image reading (E2)
Image compression to given distortion (E3)
Rate measured (E4)
Buffer updating (E5)
Validity test of measured rate (E6)
Model updating (E7)
Distortion determination (E8)
Completeness test (E9)

Integer increased by one (E10)

pp; 28 DwgNo 5/7

Title Terms: ESTIMATE; METHOD; RELATED; CONTROL; PARAMETER; DIGITAL; DATA; COMPRESS; SYSTEM; ESTIMATE; ADAPT; FILTER; PARAMETER; PARAMETER; MODEL; COMPENSATE

Derwent Class: T01; U21; U22; W01; W02; W04
International Patent Class (Main): H04N-007/50

International Patent Class (Additional): H03M-007/30

File Segment: EPI

Manual Codes (EPI/S-X): T01-D02; T01-J10D; T01-J18; U21-A05A2; U22-G01A5; W01-A02A; W01-A07G; W02-C06C; W02-F07; W04-P01A; W04-V05G

63/9/2 (Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

011986904 **Image available**
WPI Acc No: 1998-403814/199835
XRPX Acc No: N98-314800

Optical memory medium drive unit for CD, CD- ROM, LD - varies compression rate of data output from optical pick-up which reads information from optical recording medium

Patent Assignee: ALPINE KK (ALPN)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 10162500 A 19980619 JP 96329180 A 19961125 199835 B

Priority Applications (No Type Date): JP 96329180 A 19961125 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes

JP 10162500 A 10 G11B-020/10

Abstract (Basic): JP 10162500 A

The optical memory drive unit has an optical pick-up (21) which reads data from CD (100). An error detector detects error from the read data. An optical pick-up drive, returns the pick-up to original position. An encoder (29) compresses the output data from DSP (28) according to rate of data compression sensed by a speed sensor (200).

A DRAM (32) stores the compressed data . A decoder (33) reads data performs expansion of data from the DRAM. Compression is low when the sensor indicates low. When the speed is high, a compression switching device (30) makes the rate of data compression high. ADVANTAGE - Prevents degraded quality. Provides shock proof. Increases data storage . Dwq.1/7 Title Terms: OPTICAL; MEMORY; MEDIUM; DRIVE; UNIT; CD; CD; ROM; LD; VARY; COMPRESS; RATE; DATA; OUTPUT; OPTICAL; PICK; UP; READ; INFORMATION; OPTICAL; RECORD; MEDIUM Derwent Class: T03; U21; W04 International Patent Class (Main): G11B-020/10 International Patent Class (Additional): G11B-007/00; G11B-019/04; H03M-007/30File Segment: EPI Manual Codes (EPI/S-X): T03-B; T03-F02; T03-P01; U21-A05A2; W04-C; W04-E02A3 (Item 3 from file: 350) 63/9/3 DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 011769023 **Image available** WPI Acc No: 1998-185933/199817 XRPX Acc No: N98-147776 Decoding processing apparatus used in digital data transmission system has reading unit which reads decoding data corresponding to received maximum length encoding data **or** data error information from ROM Patent Assignee: NIPPON DENKI ENG KK (NIDE) Number of Countries: 001 Number of Patents: 001 Patent Family: Applicat No Kind Date Week Patent No Kind Date 199817 B JP 10041827 19980213 JP 96190272 Α 19960719 Α Priority Applications (No Type Date): JP 96190272 A 19960719 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes JP 10041827 6 HO3M-007/16 Α Abstract (Basic): JP 10041827 A The apparatus has first flip-flop (2) which latches 4 bit information and encoding data which consists of 11 bit. The signal distance between the encoding data functioning as the data error evaluation standard is stored with decoding data addresses below predetermined threshold value. A ROM (3) stores the error detection information addresses exceeding the predetermined threshold value. A reading unit reads the decoding data corresponding to the received maximum length encoding error detection information from the ROM . data or the data ADVANTAGE - Offers hardware failure check function with simple structure. Dwg.1/8 Title Terms: DECODE; PROCESS; APPARATUS; DIGITAL; DATA; TRANSMISSION; SYSTEM; READ; UNIT; READ; DECODE; DATA; CORRESPOND; RECEIVE; MAXIMUM; LENGTH; ENCODE; DATA; DATA; ERROR; DETECT; INFORMATION; ROM Derwent Class: T03; U21; W01 International Patent Class (Main): H03M-007/16 International Patent Class (Additional): G11B-020/14; G11B-020/18;

H04L-025/08 File Segment: EPI

Manual Codes (EPI/S-X): T03-P01A; U21-A05A2; W01-A01B

63/9/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

011097234 **Image available** WPI Acc No: 1997-075159/199707

XRPX Acc No: N97-062553

Image data processor e.g. for CD- ROM - has JPEG decoder to perform expansion of compressed image data per block and obtains expansion

Patent Assignee: SANYO ELECTRIC CO LTD (SAOL) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date JP 8321951 19961203 JP 95128319 Α 19950526 199707 B Α

Priority Applications (No Type Date): JP 95128319 A 19950526 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 8321951 Α 15 H04N-001/405

Abstract (Basic): JP 8321951 A

The processor performs the expansion processing of compressed image data and regenerates the image data per block. The compressed image data is obtained by performing the compression processing of the image data corresponding to the pixels forming the image on the screen for every block according to a predetermined rule. A JPEG decoder (11) expands the compressed image data per block and outputs an expansion image data `X(n)'. The number of bits of the expansion image data output from the JPEG decoder is reduced by an error diffusion circuit (12). The error diffusion circuit diffuses the error produced by the reduction of the number of bits to a surrounding pixel.

memory between blocks (13) delivers a part of the error produced in the error diffusion circuit from the termination of one block to an adjoining block. The data memory between blocks is connected to the error diffusion circuit. A lateral image data `Y(n)' per screen output from the error diffusion circuit is memorised by a pair of memory areas (14a,14b) of an image memory (14) alternately. The lateral image data stored in the memory is read alternately and is boosted to a display processor (15).

ADVANTAGE - Enables to regenerate natural image even when state of screen changes gently. Reduces memory capacity required and thereby reduces cost.

Dwg.1/15

Title Terms: IMAGE; DATA; PROCESSOR; CD; ROM; DECODE; PERFORMANCE; EXPAND ; COMPRESS; IMAGE; DATA; PER; BLOCK; OBTAIN; EXPAND; IMAGE; DATA

Derwent Class: T01; U21; W02

International Patent Class (Main): H04N-001/405

International Patent Class (Additional): H04N-001/41

File Segment: EPI

Manual Codes (EPI/S-X): T01-J10B1; T01-J10D; U21-A05A2A; W02-J03B2

DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. **Image available** 011093663 WPI Acc No: 1997-071588/199707 XRPX Acc No: N97-059364 Coding-decoding method for digital VTR - involves obtaining coefficient data of AC component whose generation probability is maximum and fed from first memory part of frame decomposition unit
Patent Assignee: SONY CORP (SONY) Number of Countries: 001 Number of Patents: 001 Patent Family: Patent No Kind Date Applicat No Kind Date Week 19950517 199707 B JP 8317394 Α 19961129 JP 95142581 Α Priority Applications (No Type Date): JP 95142581 A 19950517 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes JP 8317394 Α 9 HO4N-007/30 Abstract (Basic): JP 8317394 A The method involves using an ECC circuit (5), whose output signal is fed to a block coding part (21). The coding performs variable length coding of the input data and the error flag which shows the existence of error in variable length information is generated. The data output part (22) is fed to ROM (23) and the from a first memory generation probability of the coefficient data corresponding to the input data, is read-out from the ROM . Then, 256 kinds of generation probabilities are computed by calculation part (24). The coefficient data whose generation probability is maximum, is selected by a detector (25). The first memory unit, ROM calculation part and the detector, all from port of a first decomposition part (6). The selected data is input into the first memory part and the coefficient data of the AC component whose generation probability is maximum is fed to a block decoding part (7) which perform decoding of that data. ADVANTAGE - Obtains satisfactory reproduction image, even if error exists in data to be reproduced, by cutting error part of data. Dwg.7/11 Title Terms: CODE; DECODE; METHOD; DIGITAL; VTR; OBTAIN; COEFFICIENT; DATA; AC; COMPONENT; GENERATE; PROBABILITY; MAXIMUM; FEED; FIRST; MEMORY; PART; FRAME; DECOMPOSE; UNIT Index Terms/Additional Words: HUFFMAN ; CODING Derwent Class: U21; W04 International Patent Class (Main): H04N-007/30 International Patent Class (Additional): H03M-007/30 ; H03M-007/40 ; H03M-013/00 File Segment: EPI Manual Codes (EPI/S-X): U21-A05A2; U21-A05A2A; U21-A06; W04-B10B; W04-B10G; W04-F01F

63/9/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

011004723 **Image available**
WPI Acc No: 1996-501673/199650
XRPX Acc No: N96-422988

Analysis device of electrophotographic image forming appts. laser beam

printer - has display which generates warning to user to maintain optical system correctly according to whether peak value is reduced to predetermined level during determination by CPU

Patent Assignee: CANON KK (CANO)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 8258330 A 19961008 JP 9564095 A 19950323 199650 B

Priority Applications (No Type Date): JP 9564095 A 19950323

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 8258330 A 8 B41J-002/44

Abstract (Basic): JP 8258330 A

The device has a beam sensor (108) which detects the peak value of a laser beam intensity. An electrically erasable program read only memory (116) stores the obtd. peak value of the intensity of the laser beam during initial coordination. A CPU (114) compares the compare the peak value obtd. during normal use and peak value obtd. during initial coordination. It judges whether the value has reduced

The peak value during the determination by the CPU does not result as a horizontal-synchronising-signal **detection error**. A display (115) generates a warning to notify the user so that the optical system is regulated early according to the peak **value reduced** during determination by the CPU.

ADVANTAGE - Detects value of direct intensity of laser beam, or value of intensity of laser beam reflected in polygon mirror. Eliminates state by which horizontal-synchronising-signal **detection** error is not used.

Dwq.1/3

Title Terms: ANALYSE; DEVICE; ELECTROPHOTOGRAPHIC; IMAGE; FORMING; APPARATUS; LASER; BEAM; PRINT; DISPLAY; GENERATE; WARNING; USER; MAINTAIN; OPTICAL; SYSTEM; CORRECT; ACCORD; PEAK; VALUE; REDUCE; PREDETERMINED; LEVEL; DETERMINE; CPU

Index Terms/Additional Words: EEPROM

Derwent Class: P75; P84; S06; T04

International Patent Class (Main): B41J-002/44

International Patent Class (Additional): G03G-015/04; G03G-021/00;

H04N-001/407

File Segment: EPI; EngPI

Manual Codes (EPI/S-X): S06-A03D; S06-A14B; T04-G04A; T04-G10A

63/9/7 (Item 7 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

03714557 **Image available**
FACSIMILE COMMUNICATION SYSTEM

PUB. NO.: 04-079657 [JP 4079657 A] PUBLISHED: March 13, 1992 (19920313)

INVENTOR(s): KOIE KOJI

APPLICANT(s): BROTHER IND LTD [000526] (A Japanese Company or Corporation),

JP (Japan)

APPL. NO.: 02-193054 [JP 90193054] FILED: July 23, 1990 (19900723)

INTL CLASS: [5] H04N-001/00; H04N-001/00; H04N-001/32; H04N-001/41

JAPIO CLASS: 44.7 (COMMUNICATION -- Facsimile)

JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &

Microprocessers)

JOURNAL: Section: E, Section No. 1226, Vol. 16, No. 297, Pg. 153, June

30, 1992 (19920630)

ABSTRACT

PURPOSE: To reduce the communication time and communication line using fee by compressing each character code data constituting a message by means of the same system as that for picture data and transmitting the compressed data by adding the compressed data to compressed picture data.

CONSTITUTION: Upon receiving information from a controlling section 11, a CPU 1 stores prescribed character selecting data stored in an EEPROM 24, ROM 23, and RAM 25 in a RAM 26 in accordance with a program stored in the ROM 23. After an error correcting code for detecting and correcting errors is added to the selecting data stored in the RAM 26 by means of an encoder 113, the character selecting data with the error correcting code are stored in a RAM 112 as N-line picture data. The data stored in the RAM 112 are read out and transmitted after the data are compressed in the same way as that for picture data by means of the compressing section of a compressing/extending section 115.

63/9/8 (Item 8 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

03195582 **Image available**

FACSIMILE EQUIPMENT

PUB. NO.: 02-171082 [JP 2171082 A] PUBLISHED: July 02, 1990 (19900702)

INVENTOR(s): SUMITA KAZUYUKI

APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 63-326847 [JP 88326847] FILED: December 23, 1988 (19881223)

INTL CLASS: [5] H04N-001/393; G06F-003/12; G09G-005/26

JAPIO CLASS: 44.7 (COMMUNICATION -- Facsimile); 44.9 (COMMUNICATION -- Other); 45.3 (INFORMATION PROCESSING -- Input Output Units)

JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &

Microprocessers)

JOURNAL: Section: E, Section No. 980, Vol. 14, No. 437, Pg. 148,

September 19, 1990 (19900919)

ABSTRACT

PURPOSE: To generate a character font reduced to 1/2 in the subscanning direction by overwriting a character data onto another data while deviating by one scanning line in the subscanning direction and thinning the scanning line for an interval of one scanning line from the data.

CONSTITUTION: A CPU 1 reads a designated font data from a font ROM 2 and writes it to a relevant address of a memory 3. Then the CPU 1 deviates the same font data by one scanning line in the subscanning direction while not deviating in the main scanning direction, and overwrites the data onto the data stored already in the memory 3. At this time, the data

of the memory 3 becomes to the state shown at the center in a figure. Then the CPU 1 reads out the font data from the memory 3, transfers the data to a thinning reduction processing section 4, in which odd number scanning lines in the subscanning direction are thinned, and its resulting output data is written in the memory. Thus, the font data is compressed to 1/2 in the subscanning direction without missing of dot line elements in the main scanning direction.

63/9/9 (Item 9 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2004 JPO & JAPIO. All rts. reserv.

02939167 **Image available**

FACSIMILE EQUIPMENT

PUB. NO.: 01-236767 [JP 1236767 A] PUBLISHED: September 21, 1989 (19890921)

INVENTOR(s): MAEMURA KOICHIRO

TANAKA SHIGETAKA

APPLICANT(s): RICOH CO LTD [000674] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 63-154916 [JP 88154916] FILED: June 24, 1988 (19880624) INTL CLASS: [4] H04N-001/32; H04L-001/00

JAPIO CLASS: 44.7 (COMMUNICATION -- Facsimile); 44.3 (COMMUNICATION --

Telegraphy)

JOURNAL: Section: E, Section No. 861, Vol. 13, No. 568, Pg. 89,

December 15, 1989 (19891215)

ABSTRACT

PURPOSE: To shorten the communication time, to effectively use an ECM, and to simplify an equipment by determining the data transmission speed based on the total number of transmission frames and the number of frames of data error.

CONSTITUTION: A central processing unit CPU 1, a ROM 2, a RAM 3, a scanner 4, a plotter 5, an operation display part 6, a parameter memory 11, an encoding / decoding part 7, a MODEM 8, and a network controller 9 transmit and receive data to and from one another through a bus 10. When the number of times of retransmission of picture information reaches, for example, three, a number (n) of frames of data error is discriminated and the data transmission speed at this time is discriminated. For example, in case of 9600bps, the error rate of the number (n) of frames to a total number N of frames is compared with a set value (a), and the MODEM 8 is controlled to determine 2400bps when the error rate is larger than (a). When it is smaller than (a), the transmission speed is set to 4800bps when it is larger than a set value (b).

```
File 348: EUROPEAN PATENTS 1978-2004/May W01
         (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040506,UT=20040429
         (c) 2004 WIPO/Univentio
Set
        Items
                Description
                JEDEC OR (JT OR JOINT) () ELECTRONIC ?? () DEVICE? ? () ENGINE-
S1
          363
             ER? ? OR JESD3()C OR JESD()3
                PLD OR PLDS OR FPLD OR FPLDS OR PAL OR PALS OR EPLD OR EPL-
S2
        40877
             DS OR PLA OR PLAS OR PROM OR PROMS OR SPLD OR SPLDS OR CPLD -
             OR CPLDS OR FPGA OR FPGAS
                ROM OR ROMS OR EPROM OR EPROMS OR EEPROM OR EEPROMS OR UVR-
S3
       172165
             OM OR UVROMS OR PEEL OR PEELS OR GAL OR GALS
                PROGRAMABLE OR PROGRAMMABLE OR PROGRAMED OR -
S4
       156981
             PROGRAMING OR PROGRAMMING
$5
         3738
                S4(1W)LOGIC(1W)DEVICE? ?
                S4(1W)LOGIC(1N)ARRAY? ?
S6
         3106
S7
         4883
                S4(1W)GATE? ?(1W)ARRAY? ?
                S4()(IC OR ICS)
S8
           97
                S4(1W)INTEGRATED()CIRCUIT???????
S9
          545
                S4(1W)ELLECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?
S10
            O
           73
                GENERIC (1W) ARRAY? ? (1W) LOGIC? ?
$11
                (READONLY OR READ()ONLY)(1W)(MEMORY? OR MEMORIES OR STORAG-
S12
        39255
             E?)
                STORAGE? OR STORE? ? OR STORING OR MEMORY? OR MEMORIES OR -
       607469
S13
             PRESTOR??? ?
                S13(3N) (FIELD? ? OR SPACE? ? OR AREA? ? OR REGION? ? OR SE-
S14
       112744
             CTOR? ? OR ZONE? ? OR SECTION? ? OR PART OR PARTS OR PORTION?
             ?)
       157762
                S13(3N) DATA
S15
                S13(3N) (PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PRO-
S16
        88188
             PERTY? OR PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATT-
             RIBUTES OR BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR -
             FEATURES)
                S4(1W) ELECTRICAL?? ?(1W) ERASE???? ?(1W) LOGIC? ?
            0
S17
         4848
                BINARY(1W)TREE? ? OR HUFFMAN
S18
                PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PROPERTY? OR
S19
      1193205
              PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATTRIBUTES OR
              BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR FEATURES
                S19(3N)(COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PACK-
S20
        84201
             ED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR REDU-
             C? OR REDN? ? OR DIMINISH?)
S21
        95538
                S19(3N) (REDUC??? ? OR REDUCTION? OR DECREAS? OR DECREMENT?
             OR ENCOD??? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? -
             ?)
       400787
                NONCONFORM? OR INCOMPAT? OR INOPERA? OR UNUSUAL OR DYSFUNC-
S22
             T? OR INCOMPLETE? OR DEVIA? OR IRREGULAR? OR EXCEPTION? ? OR -
             DISTORT?
                DISFUNCT? OR UNCONFORM? OR UNCOMPAT? OR UNCOMPLET? OR DISC-
S23
       375134
             REPAN? OR DEGRAD? OR DISPARAT? OR BUG? ? OR ERROR? ? OR CORRU-
             PT? OR INVALID?
S24
       990838
                MISTAK? OR FAIL???? ? OR PROBLEM? ? OR FAULT? OR DEFECT? OR
              DEFICIEN? OR ABNORMA? OR DAMAG? OR FLAW? OR IMPAIR?
S25
        68983
                ABERRA? OR MALFUNCTI? OR IMPERFECT?
                DEBUG? OR DE()BUG???? ? OR ECC OR ECCS OR EDAC OR EDACS
S26
        12449
                S4(1W)ELECTRICAL?? ?(1W)ERAS?(1W)LOGIC? ?
S27
           21
                S22:S25(3N)(DETECT? OR DET? ? OR DETERMIN? OR CHECK? OR CH-
S28
       119531
             EQU? OR DX OR TRACE? ? OR TRACING OR SEEK? OR PROBE? ? OR PRO-
             BING? OR SEARCH? OR SURVEY?)
```

S22:S25(3N) (DISCRIMINAT? OR ANALYS? OR ANALYT? OR ANALYZ? -

S29

OR ASSESS? OR SELFDIAGNOS? OR SELFTEST? OR BIST OR EXAMIN? OR LOCAT? OR REVIEW?)

- 76373 S22:S25(3N) (DIAGNOS? OR IDENTIFY? OR IDENTIFIE? ? OR IDENT-IFIC? OR SCREEN? OR APPRAIS? OR EVALUAT? OR SENS??? ? OR RECO-GNIS? OR RECOGNIZ? OR RECOGNIT?)
- S31 123289 S22:S25(3N)(INSPECT? OR MONITOR? OR TRACK? OR TEST??? ? OR SCAN OR SCANS OR SCANNED OR SCANN??? ? OR FILTR? OR DETECT??? ? OR FILTER??? ?)
- S32 37 (S2:S3 OR S5:S12 OR S27) (25N) S1
- \$33 31266 (\$2:\$3 OR \$5:\$12 OR \$27) (25N)\$14:\$16
- S34 178 S33(25N) (S18 OR S20:S21)
- S35 45877 DATA(3N)(COMPRESS?????? OR COMPACT?????? ? OR PACK?? OR PAC-KED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS????? OR RED-UC? OR REDN?? OR DIMINISH?)
- S36 32684 DATA(3N)(DECREAS? OR DECREMENT? OR ENCOD????? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? ?)
- S37 903 S33(25N)S35:S36
- S38 0 (S34 OR S37) (25N) S1
- S39 16 (S34 OR S37) (25N) S26
- S40 119531 S22:S25(3N) (DETECT? OR DET? ? OR DETERMIN? OR CHECK? OR CH-EQU? OR DX OR TRACE? ? OR TRACING OR SEEK? OR PROBE? ? OR PRO-BING? OR SEARCH? OR SURVEY?)
- S41 43195 S22:S25(3N)(DISCRIMINAT? OR ANALYS? OR ANALYT? OR ANALYZ? OR ASSESS? OR SELFDIAGNOS? OR SELFTEST? OR BIST OR EXAMIN? OR
 LOCAT? OR REVIEW?)
- 76373 S22:S25(3N)(DIAGNOS? OR IDENTIFY? OR IDENTIFIE? ? OR IDENTIFIC? OR SCREEN? OR APPRAIS? OR EVALUAT? OR SENS??? ? OR RECOGNIS? OR RECOGNIZ? OR RECOGNIT?)
- 543 123289 S22:S25(3N)(INSPECT? OR MONITOR? OR TRACK? OR TEST??? ? OR SCAN OR SCANS OR SCANNED OR SCANN??? ? OR FILTR? OR DETECT??? ? OR FILTER??? ?)
- S44 23 (S34 OR S37) (25N) S40:S43
- S45 32 S39 OR S44
- S46 32 IDPAT (sorted in duplicate/non-duplicate order)
- S47 31 IDPAT (primary/non-duplicate records only)

? t47/5, k/9, 11, 13-16 (Item 9 from file: 348) 47/5,K/9 DIALOG(R) File 348: EUROPEAN PATENTS (c) 2004 European Patent Office. All rts. reserv. 01113164 Disk recording system Plattenaufzeichnungssystem Systeme d'enregistrement de disque PATENT ASSIGNEE: Sanyo Electric Co., Ltd., (2206450), 5-5, Keihanhondori 2-chome, Moriguchi-shi, Osaka, (JP), (Proprietor designated states: all) INVENTOR: Tsukihashi, Akira, 1314-11, Yorikido, Ohizumi-machi, Ohra-gun, Gunma, (JP) LEGAL REPRESENTATIVE: Cross, Rupert Edward Blount et al (42891), BOULT WADE TENNANT, Verulam Gardens 70 Gray's Inn Road, London WC1X 8BT, (GB) PATENT (CC, No, Kind, Date): EP 974966 A1 000126 (Basic) EP 974966 В1 APPLICATION (CC, No, Date): EP 99305602 990715; PRIORITY (CC, No, Date): JP 98206548 980722 DESIGNATED STATES: DE; ES; FR; GB; IT; NL EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI INTERNATIONAL PATENT CLASS: G11B-020/10; G11B-019/02 CITED PATENTS (EP B): EP 520381 A; EP 726571 A; EP 825602 A; US 5315571 A; US 5343455 A; US 5583838 A CITED REFERENCES (EP B): PATENT ABSTRACTS OF JAPAN vol. 1996, no. 10, 31 October 1996 (1996-10-31) & JP 08 147879 A (YAMAHA CORP), 7 June 1996 (1996-06-07); ABSTRACT EP 974966 A1 When a buffer underrun decision circuit (17) decides that a buffer underrun is about to occur, data recording on the disk is interrupted by a recording control circuit (18). On the other hand, when the buffer underrun decision circuit (17) determines that a buffer underrun situation has been avoided, data recording is resumed by the recording control circuit (18). At this time, data recording is resumed from a position of the disk which is continuous to data recorded by the time the data recording was interrupted, thereby recording new data continuous to the last recorded data. ABSTRACT WORD COUNT: 97 Figure number on first page: 1 LEGAL STATUS (Type, Pub Date, Kind, Text): 031022 B1 Granted patent Grant: 20000126 Al Published application with search report Application: 20000426 Al Date of request for examination: 20000228 Examination: LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

```
Available Text
                 Language
                             Update
                                        Word Count
      CLAIMS A
                 (English)
                             200004
                                          575
      CLAIMS B
                 (English)
                             200343
                                          579
      CLAIMS B
                  (German)
                             200343
                                          501
      CLAIMS B
                  (French)
                             200343
                                          708
      SPEC A
                 (English)
                             200004
                                         3837
      SPEC B
                 (English)
                             200343
                                         3793
Total word count - document A
                                         4413
```

`,

Total word count - document B 5581
Total word count - documents A + B 9994

...SPECIFICATION and from a host personal computer 10 connected outside the system. Numeral 11 denotes an **encoder** which modulates **data** input thereto via the interface 8 into recording data to be recorded in the disk and 12 denotes an input **data** RAM for **storing** input **data** to be modulated by the encoder 11.

When the encoder 11 modulates data based on the CD- ROM standard, a sync, a header, an EDC (Error Detection Code), and an ECC (Error Correction Code) for CD-ROM data are added to the input data. Subsequently, a...

...SPECIFICATION and from a host personal computer 10 connected outside the system. Numeral 11 denotes an **encoder** which modulates **data** input thereto via the interface 8 into recording data to be recorded in the disk and 12 denotes an input **data** RAM for **storing** input **data** to be modulated by the encoder 11.

When the **encoder** 11 modulates **data** based on the CD- **ROM** standard, a sync, a header, an EDC (**Error Detection** Code), and an **ECC** (Error Correction Code) for CD-ROM data are added to the input data. Subsequently, a...

47/5,K/11 (Item 11 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00765243

METHOD FOR RECORDING/REPRODUCING DATA, DATA REPRODUCING DEVICE, AND RECORDING MEDIUM

DATENAUFZEICHNUNGS-/WIEDERGABEVERFAHREN, DATENWIEDERGABEVORRICHTUNG, UND AUFZEICHNUNGSMEDIUM

PROCEDE D'ENREGISTREMENT/DE RESTITUTION DE DONNEES, DISPOSITIF DE RESTITUTION DE DONNEES ET SUPPORT D'ENREGISTREMENT

PATENT ASSIGNEE:

SONY CORPORATION, (214021), 7-35 Kitashinagawa 6-chome Shinagawa-ku, Tokyo 141, (JP), (Proprietor designated states: all) INVENTOR:

SAKO, Yoichiro, Sony Corporation 7-35, Kitashinagawa 6-chome, Shinagawa-ku Tokyo 141, (JP)

YAMAGAMI, Tamotsu, Sony Corporation 7-35, Kitashinagawa 6-chome, Shinagawa-ku Tokyo 141, (JP)

OTSUKA, Satoshi, Sony Corporation 7-35, Kitashinagawa 6-chome, Shinagawa-ku Tokyo 141, (JP)

TOBITA, Minoru, Sony Corporation 7-35, Kitashinagawa 6-chome, Shinagawa-ku Tokyo 141, (JP)

LEGAL REPRESENTATIVE:

Melzer, Wolfgang, Dipl.-Ing. et al (8278), Patentanwalte Mitscherlich & Partner, Sonnenstrasse 33, 80331 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 729150 A1 960828 (Basic)

EP 729150 A1 980520 EP 729150 B1 031203 WO 96008010 960314

APPLICATION (CC, No, Date): EP 95930703 950906; WO 95JP1766 950906 PRIORITY (CC, No, Date): JP 94216315 940909

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G11B-020/12

CITED PATENTS (EP B): JP 3122870 A; JP 4139664 A; JP 4159661 A; JP 55004774 A; JP 62271535 A; JP 63157374 A; JP 63253573 A; US 4680764 A

CITED PATENTS (WO A): US 267723 A; US 5304359 A; WO 8200478 A CITED REFERENCES (EP B):

PATENT ABSTRACTS OF JAPAN vol. 16, no. 454 (P-1425), 21 September 1992 & JP 04 159661 A (OLYMPUS OPTICAL CO LTD), 2 June 1992,;

ABSTRACT EP 729150 A1

Data recorded on such a recording medium as an optical disk, are reproduced excellently even when burst errors occur during reproduction, without reducing the data record capacity of the recording medium. A first error correcting code is generated for every block of a certain amount of data, and added to the corresponding block, a second error correcting code is generated for the every block and added to the other blocks than the block for which the second error correcting code is generated. These data and codes are recorded on the recording medium. When reproducing the data, recorded on the recording medium in blocks of data, whether or not detection correction is possible or not is judged based on the first error correcting codes included in the reproduced data. When the detection correction of a block is possible, the detection correction is performed, and when impossible, missing information is generated based on the second error correcting codes reproduced from the data blocks and corresponding to the block of which detection correction is impossible. Using the missing information and the first error correcting code, missing correction of the data block is performed. (see image in original document) ABSTRACT WORD COUNT: 21487 NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 031203 B1 Granted patent

Application: 960619 A International application (Art. 158(1))

Application: 960828 A1 Published application (A1with Search Report

; A2without Search Report)

Examination: 960828 Al Date of filing of request for examination:

960419

Search Report: 980520 Al Drawing up of a supplementary European search

report: 980403

Examination: 981014 Al Date of despatch of first examination report:

980828

LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	2018
CLAIMS B	(English)	200349	2415
CLAIMS B	(German)	200349	2254
CLAIMS B	(French)	200349	2856
SPEC A	(English)	EPAB96	18113
SPEC B	(English)	200349	17353
Total word count	t - documen	t A	20135
Total word count	t - documen	t B	24878
Total word count	t - documen	ts A + B	45013

...SPECIFICATION mode stored therein, a RAM 63 used as a work area such as the program data stored in the ROM 62, an input/output port 64, a decoder 67 for error -correcting and error - checking reproduced data, an encoder 68 for generating a parity-check code for data supplied thereto from the host computer...

... SPECIFICATION shown in FIG. 2.

In the controller 44 shown in FIG. 3, a bus 61 composed of an address bus, a data bus and a control bus is connected to a CPU

(central processing unit) 60. A ROM 62 with various program data and parameter data for effecting processing in the reproducing operation mode stored therein, a RAM 63 used as a work area such as the program data stored in the ROM 62, an input/output port 64, a decoder 67 for error -correcting and error - checking reproduced data, an encoder 68 for generating a parity-check code for data supplied thereto from the host computer...

47/5,K/13 (Item 13 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00760823

Image processing and recording media Bildverarbeitung und Aufzeichnungtrager Traitement d'image et moyen d'enregistrement PATENT ASSIGNEE:

SONY CORPORATION, (214024), 6-7-35 Kitashinagawa Shinagawa-ku, Tokyo, (JP), (applicant designated states: AT;CH;GB;IT;LI;SE)

Tanaka, Masayoshi, c/o Intellectual Prop. Div., Sony Corp., 7-6-35 Kitashinagawa, Shinagawa-ku, Tokyo 141, (JP)

Suzuoki, Masakazu, c/o Intellectual Prop. Div., Sony Corp., 7-6-35 Kitashinagawa, Shinagawa-ku, Tokyo 141, (JP)

Okada, Toyoshi, c/o Intellectual Prop. Div., Sony Corp., 7-6-35

Kitashinagawa, Shinagawa-ku, Tokyo 141, (JP) LEGAL REPRESENTATIVE:

Cotter, Ivan John et al (29661), D. YOUNG & CO. 21 New Fetter Lane, London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 715279 A2 960605 (Basic)

EP 715279 A3 970226

APPLICATION (CC, No, Date): EP 95308662 951201; PRIORITY (CC, No, Date): JP 94300029 941202 DESIGNATED STATES: AT; CH; GB; IT; LI; SE INTERNATIONAL PATENT CLASS: G06T-015/10;

ABSTRACT EP 715279 A2

An image data processing system includes a geometry transfer engine (GTE) (61) and a graphic processing unit (GPU) (62) which act in combination as a transforming means for converting three-dimensional image data retrieved from a CD-ROM disk (81) into two-dimensional image data for drawing an image on a two-dimensional display screen, and a frame buffer (63) which serves as a memory having an image data storage area (picture data area) for storage of the image data and at least a color data tables storage area (CLUT area) for storage of multiple color lookup data tables in a two-dimensional arrangement, each color data table including a color data wherein the structure is arranged substantially identical to that of each pixel of data in the image. A greater number of colors are thus facilitated and the data processing is simplified. (see image in original document)

ABSTRACT WORD COUNT: 165

LEGAL STATUS (Type, Pub Date, Kind, Text):

Assignee: 001227 A2 Transfer of rights to new applicant: Sony

Computer Entertainment Inc. (3064090) 7-1-1

Akasaka, Minato-ku Tokyo 107-0052 JP

Application: 960605 A2 Published application (Alwith Search Report

; A2without Search Report)

Change: 031001 A2 Title of invention (German) changed: 20030813 Examination: 010530 A2 Date of dispatch of the first examination

•

report: 20010412

Search Report: 970226 A3 Separate publication of the European or

International search report

Examination: 970910 A2 Date of filing of request for examination:

970711

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Word Count Available Text Language Update 510 CLAIMS A (English) EPAB96 7223 SPEC A (English) EPAB96 Total word count - document A 7733 Total word count - document B 0 Total word count - documents A + B 7733

...SPECIFICATION disk drive 81 for retrieving a program or data from an optical disk of CD- ROM, a decoder 82 for decoding an encoded, stored program or data accompanied with error correction codes (ECC), and a buffer 83 of, for example, 32 kilobytes for storage of data retrieved from...

47/5,K/14 (Item 14 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00760561

1

Method of producing image data and associated recording medium

Verfahren zur Erzeugung von Bilddaten und zugehoriger Aufzeichnungstrager

Methode pour produire des donnees d'image et support d'enregistrement
associe

PATENT ASSIGNEE:

Sony Computer Entertainment Inc., (3064090), 7-1-1 Akasaka, Minato-ku, Tokyo 107-0052, (JP), (Proprietor designated states: all) INVENTOR:

Suzuoki, Masakazu, c/o SONY CORP, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Furuhashi, Makoto, c/o SONY CORP, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Tanaka, Masayoshi, c/o SONY CORP, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Yutaka, Teiji, c/o SONY CORP, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Muller, Frithjof E., Dipl.-Ing. et al (8661), Muller Hoffmann & Partner Patentanwalte Innere Wiener Strasse 17, 81667 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 715278 A2 960605 (Basic)

EP 715278 A3 960710 EP 715278 B1 021023

APPLICATION (CC, No, Date): EP 95118965 951201;

PRIORITY (CC, No, Date): JP 94300021 941202

DESIGNATED STATES: AT; DE; DK; ES; GB

INTERNATIONAL PATENT CLASS: G06T-015/10; G06T-015/50

CITED PATENTS (EP B): GB 2272137 A

ABSTRACT EP 715278 A3

A data format is provided capable of assigning a desired color lookup table (CLUT) to a texture pattern of each polygon drawn on a two-dimensional display screen. Assuming that TPF represents a pixel depth of the texture pattern, when TPF is 00, 01, and 10, the format (CLUT) is applied of a 4-bit mode, an 8-bit mode, and 16-bit mode respectively, whereby its related command is decreased in word length

and thus requires less storage in a source video memory. (see image in original document)

ABSTRACT WORD COUNT: 101

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 001018 A2 Date of dispatch of the first examination

report: 20000905

Application: 960605 A2 Published application (Alwith Search Report

; A2without Search Report)

Lapse: 040121 B1 Date of lapse of European Patent in a

contracting state (Country, date): AT

20021023, ES 20030429,

Lapse: 030910 Bl Date of lapse of European Patent in a

contracting state (Country, date): AT

20021023,

Assignee: 001025 A2 Transfer of rights to new applicant: Sony

Computer Entertainment Inc. (3064090) 7-1-1

Akasaka, Minato-ku Tokyo 107-0052 JP

Grant: 021023 B1 Granted patent

Oppn None: 031015 Bl No opposition filed: 20030724

Change: 960703 A2 Obligatory supplementary classification

(change)

Search Report: 960710 A3 Separate publication of the European or

International search report

Examination: 970212 A2 Date of filing of request for examination:

961211

Change: 970319 A2 Representative (change)

LANGUAGE (Publication, Procedural, Application): English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	1356
CLAIMS B	(English)	200243	621
CLAIMS B	(German)	200243	555
CLAIMS B	(French)	200243	756
SPEC A	(English)	EPAB96	9584
SPEC B	(English)	200243	9482
Total word coun	t - documen	t A	10943
otal word count - document B			11414
Total word coun	t - documen	ts A + B	22357

- ...SPECIFICATION disk drive 81 for retrieving a program or data from an optical disk of CD- ROM, a decoder 82 for decoding an encoded, stored program or data accompanied with error correction codes (ECC), and a buffer 83 of, for example, 32 kilobytes for storage of data retrieved from...
- ...SPECIFICATION disk drive 81 for retrieving a program or data from an optical disk of CD- ROM, a decoder 82 for decoding an encoded, stored program or data accompanied with error correction codes (ECC), and a buffer 83 of, for example, 32 kilobytes for storage of data retrieved from...

47/5,K/15 (Item 15 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00760369

Method of producing image data, image data processing apparatus, and

recording medium

Bilddatenerzeugungsverfahren, Bilddatenverarbeitungsgerat und Aufzeichnungs medium

Methode pour produire des donnees d'image, appareil de traitement de donnees d'image et support d'enregistrement

PATENT ASSIGNEE:

SONY CORPORATION, (214022), 7-35, Kitashinagawa 6-chome Shinagawa-ku, Tokyo, (JP), (applicant designated states: AT;BE;DE;FR;GB;NL) INVENTOR:

Tanaka, Masayoshi, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Oka, Masaaki, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Yutaka, Teiji, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Hagiwara, Kaoru, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Ichioka, Hidetoshi, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Muller, Frithjof E., Dipl.-Ing. et al (8661), Patentanwalte MULLER & HOFFMANN, Innere Wiener Strasse 17, 81667 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 715277 A2 960605 (Basic)

EP 715277 A3 960821

APPLICATION (CC, No, Date): EP 95118239 951120;

PRIORITY (CC, No, Date): JP 94300020 941202

DESIGNATED STATES: AT; BE; DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G06T-015/10; G06T-017/00;

ABSTRACT EP 715277 A3

A method and apparatus includes a geometry transfer engine (GTE) 61 acting as a coordinate transforming means for converting three-dimensional image data of TMD format into two-dimensional image data by perspective view transformation, and a graphics processing unit (GPU) 62 acting as a drawing means for transferring the two-dimensional image data in a given transmission standard to draw an image on a two-dimensional display screen. A structure of the three-dimensional image data, excluding the information to be perspective view transformed, is arranged identical to that of the given transmission standard of the two-dimensional image data. Accordingly, in the GTE 61, the information to be perspective view transformed is discriminated from the other data of the three-dimensional image data wherein the structure is identical to that of the given transmission standard of the two-dimensional image data, subjected to the perspective view transformation, and is combined with the other data wherein the structure is identical to that of the given transmission standard for production of the two-dimensional image data. An original format file including data to be transformed is thereby easily converted into a file having a new format. (see image in original document)

ABSTRACT WORD COUNT: 222

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 001018 A2 Date of dispatch of the first examination

report: 20000905

Application: 960605 A2 Published application (Alwith Search Report

;A2without Search Report)

Assignee: 001025 A2 Transfer of rights to new applicant: Sony

Computer Entertainment Inc. (3064090) 7-1-1

Akasaka, Minato-ku Tokyo 107-0052 JP

Change: 960814 A2 Obligatory supplementary classification

(change)

Search Report: 960821 A3 Separate publication of the European or

International search report

Change: 970319 A2 Representative (change)

Examination: 970326 A2 Date of filing of request for examination:

970122

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A (English) EPAB96 1187 SPEC A (English) EPAB96 12151

SPEC A (English) EPAB96 12151
Total word count - document A 13338

Total word count - document B 0

Total word count - documents A + B 13338

...SPECIFICATION disk drive 81 for retrieving a program or data from an optical disk of CD- ROM, a decoder 82 for decoding an encoded, stored program or data accompanied with error correction codes (ECC), and a buffer 83 of, for example, 32 kilobytes for storage of data retrieved from...

47/5,K/16 (Item 16 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00753610

Method of and apparatus for recording and reproducing data and transmitting data

Verfahren und Vorrichtung zur Datenaufzeichnung und Wiedergabe und Datenubertragung

Methode et appareil pour l'enregistrement et la reproduction de donnees et la transmission de donnees

PATENT ASSIGNEE:

SONY CORPORATION, (214022), 7-35, Kitashinagawa 6-chome Shinagawa-ku, Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

Sako, Yoichiro, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Otsuka, Satoshi, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

Yamagami, Tamotsu, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Melzer, Wolfgang, Dipl.-Ing. et al (8278), Patentanwalte Mitscherlich & Partner, Sonnenstrasse 33, 80331 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 709846 A2 960501 (Basic)

EP 709846 A3 980311 EP 709846 B1 010926

APPLICATION (CC, No, Date): EP 95116741 951024;

PRIORITY (CC, No, Date): JP 94258522 941024

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G11B-020/18

CITED PATENTS (EP B): US 4680764 A; US 4802169 A; US 5272692 A CITED REFERENCES (EP B):

E. FUJIWARA ET AL.: "Cross-Interleave Reed-Solomon Code" ESSENTIALS OF ERROR-CONTROL CODING TECHNIQUES, 1990, pages 237-245, XP002048536;

ABSTRACT EP 709846 A2

First error-processing data are generated (39) with respect to a predetermined amount of data, and second error-processing data are

generated (40) with respect to each of a plurality of blocks produced by dividing the predetermined amount of data. Data of record units are generated from the predetermined amount of data, the first error-processing data, and the second error-processing data. The data of record units are recorded (8) on and reproduced from a recording medium (4). Errors are corrected (2) in the predetermined amount of data in the reproduced data of record units with the first error-processing data with respect to each of the record units. If errors cannot be corrected, at least errors are detected in the predetermined amount of data in each of the blocks with the second error-processing data. If errors are detected in N (N is a positive integer) successive blocks, all data in at least one block which is not positioned at an end of the N $\,$ successive blocks are regarded as being erased, thereby correcting errors in the predetermined amount of data in the record units with the first error-processing data, thus producing reproduced data. (see image in original document)

ABSTRACT WORD COUNT: 222

NOTE:

Figure number on first page: 3

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 010926 B1 Granted patent

Application: 960501 A2 Published application (Alwith Search Report

;A2without Search Report)

Oppn None: 020918 B1 No opposition filed: 20020627

Search Report: 980311 A3 Separate publication of the European or

International search report

Examination: 980909 A2 Date of filing of request for examination:

980714

Examination: 981014 A2 Date of despatch of first examination report:

980828

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Word Count Available Text Language Update EPAB96 2828 CLAIMS A (English) CLAIMS B 200139 1128 (English) CLAIMS B 200139 1039 (German) CLAIMS B 200139 1312 (French) SPEC A EPAB96 (English) 14873 SPEC B 200139 13230 (English) Total word count - document A 17705 Total word count - document B 16709 Total word count - documents A + B 34414

- ...SPECIFICATION 60 and composed of an address bus, a data bus, and a control bus, a ROM 62 for storing various program data, parameter data, etc. for effecting various processes in the reproducing mode, a RAM 63 for use as a work storage area for storing program data, parameter data, etc. which are stored in the ROM 62, and an input/output port 64. The controller 44 also has a decoder 67 for effecting error correction and error checking on reproduced data, an encoder 68 for generating parity data with respect to data supplied from the host computer 3...
- ...SPECIFICATION 60 and composed of an address bus, a data bus, and a control bus, a ROM 62 for storing various program data, parameter data, etc. for effecting various processes in the reproducing mode, a RAM 63 for use as a work storage area for storing program data, parameter data, etc. which are stored in the ROM 62, and an input/output port 64. The controller 44 also has a decoder 67 for

effecting error correction and error **checking** on reproduced **data**, an **encoder** 68 for generating parity data with respect to data supplied from the host computer 3...

? t47/5, k/19, 23, 29

:

(Item 19 from file: 348) 47/5,K/19 DIALOG(R) File 348: EUROPEAN PATENTS (c) 2004 European Patent Office. All rts. reserv. 00567031 Memory card device Speicherkartengerat Dispositif de carte a memoire PATENT ASSIGNEE: KABUSHIKI KAISHA TOSHIBA, (213130), 72, Horikawa-cho, Saiwai-ku, Kawasaki-shi, Kanagawa-ken 210-8572, (JP), (applicant designated states: DE; FR; GB) TOSHIBA AVE CO., LTD, (722723), 3-3-9, Shinbashi, Minato-ku, Tokyo 105, (JP), (applicant designated states: DE; FR; GB) INVENTOR: Konishi, Kazuo, c/o Int. Property Division, Kabushiki Kaisha Toshiba, 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105, (JP) Yoshioka, Shimpei, c/o Int. Property Division, Kabushiki Kaisha Toshiba, 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105, (JP) Maruyama, Koji, c/o Int. Property Division, Kabushiki Kaisha Toshiba, 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105, (JP) Maekawa, Tomoyuki, c/o Int. Property Division, Kabushiki Kaisha Toshiba, 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105, (JP) Sato, Toshiaki, c/o Int. Property Division, Kabushiki Kaisha Toshiba, 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105, (JP) LEGAL REPRESENTATIVE: Henkel, Feiler, Hanzel (100401), Mohlstrasse 37, 81675 Munchen, (DE) EP 569040 A2 PATENT (CC, No, Kind, Date): 931110 (Basic) EP 569040 A3 950308 EP 569040 B1 990728 APPLICATION (CC, No, Date): EP 93107569 930510; PRIORITY (CC, No, Date): JP 11563092 920508; JP 11601892 920508 DESIGNATED STATES: DE; FR; GB INTERNATIONAL PATENT CLASS: G06F-011/20; G06F-011/00;

ABSTRACT EP 569040 A2

This invention provides a memory card device using an EEPROM (16) as a semiconductor memory. When a data write-in defective area is detected in the storage area of the EEPROM (16), a space area is retrieved from the storage area of the EEPROM (16) as a relieving area and data to be written into the data write-in defective area is written into the relieving area. Then, when the relieving area becomes full and a data write-in defective area is detected in the storage area of the EEPROM (16), another space area is retrieved from the storage area of the EEPROM (16) as a new relieving area and data to be written into the data write-in defective area is written into the new relieving area. (see image in original document)

ABSTRACT WORD COUNT: 131

LEGAL STATUS (Type, Pub Date, Kind, Text):

000712 B1 No opposition filed: 20000429 Oppn None:

Application: 931110 A2 Published application (Alwith Search Report

;A2without Search Report)

931110 A2 Date of filing of request for examination: Examination:

930607

Change: 950222 A2 Obligatory supplementary classification

(change)

Search Report: 950308 A3 Separate publication of the European or International search report

Examination: 980401 A2 Date of despatch of first examination report:

980216

Grant: 990728 B1 Granted patent

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Word Count Available Text Language Update 9930 743 CLAIMS B (English) CLAIMS B 9930 637 (German) 9930 866 CLAIMS B (French) SPEC B (English) 9930 5773 Total word count - document A 0 Total word count - document B 8019 Total word count - documents A + B 8019

- ...CLAIMS indicating attribute information of data written into the block is stored is provided in the storage area of said EEPROM (16) and the remaining storage capacity of the storage area of said EEPROM (16) into which data can be written is written into the attribute area.
 - 10. The memory card device according to claim 9

whereby the remaining storage capacity written into the **attribute** area is **reduced** according to the capacity of the data write-in defective area and the capacity of the data relieving area when the data write-in **defective** area is **detected** in the storage area of said EEPROM (16) by said relieving means and data to...

47/5,K/23 (Item 23 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

01109996 **Image available**

IMAGE DISPLAY SYSTEM

SYSTEME AFFICHEUR D'IMAGE

Patent Applicant/Assignee:

PIXIA CORP, 21025 Stanford Square, Suite 401, Sterling, VA 20166, US, US (Residence), US (Nationality), (For all designated states except: US) Patent Applicant/Inventor:

ERNST Rudolf O, 800 Lake Park Drive, Union Hall, VA 24176, US, US (Residence), CH (Nationality), (Designated only for: US)

LUI Pun Sing, RM 1903 Harbor Centre, Hong Kong, HK, CN (Residence), CN (Nationality), (Designated only for: US)

Legal Representative:

MOORE Steven (agent), 1600 Tysons Boulevard, McLean, VA 22102, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200432107 A2 20040415 (WO 0432107)

Application: WO 2003US30639 20030930 (PCT/WO US03030639)

Priority Application: US 2002263930 20021003

Parent Application/Grant:

Related by Continuation to: US 2002263930 20021003 (CIP)

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G09G
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims

English Abstract

Fulltext Word Count: 11233

An image display system is disclosed that enables users to navigate very large digital images quickly and seamlessly. The system is optimized to transmit image data from a disk drive to a display at high data rates. The image data is stored on the disk drive in a file format optimized for high speed retrieval, display, and seamless navigation. The image display system can be cascaded for showing two or more contiguous images on multiple displays.

French Abstract

La presente invention concerne un systeme afficheur d'image qui permet a des utilisateurs de naviguer dans de tres grandes images numeriques rapidement et en continu. Ce systeme est optimise pour transmettre des donnees image d'un lecteur de disque a un afficheur a hauts debits de donnees. Les donnees image sont stockees sur un lecteur de disque dans un format de fichier optimise en vue d'une localisation, d'un affichage et d'une navigation en continu a vitesse elevee. Ce systeme afficheur d'image peut etre monte en cascade de maniere a montrer au moins deux images contigues sur des afficheurs multiples.

Legal Status (Type, Date, Text)
Publication 20040415 A2 Without international search report and to be republished upon receipt of that report.

Fulltext Availability: Detailed Description

Detailed Description

... use of USB ports for providing improved communication with the system such as for acquiring debugging messages. A further advantage is the use of a more sophisticated FPGA allowing for real-time manipulation of data. For example, image data can be stored compressed on the disk 10

drive and then decompressed in real time using the FPGA when the data is needed for viewing.

[00040] The software embodiment of the present invention...

47/5,K/29 (Item 29 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00272765

MULTI-MODE IDENTIFICATION SYSTEM
SYSTEME D'IDENTIFICATION MULTI-MODE
Patent Applicant/Assignee:
AVID MARKETING INC,
BEIGEL Michael L,
POLISH Nathaniel,
MALM Robert E,
Inventor(s):

BEIGEL Michael L, POLISH Nathaniel, MALM Robert E,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9420941 Al 19940915

Application: WO 93US2112 19930310 (PCT/WO US9302112)

Priority Application: WO 93US2112 19930310

Designated States: AT AU BB BG BR CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR SN TD TG

Main International Patent Class: G08C-019/06

Publication Language: English

Fulltext Availability: Detailed Description

Claims

Fulltext Word Count: 12519

English Abstract

A multi-mode identification system is comprised of readers and tags wherein a reader (100) in the proximity of and inductively coupled (100) to a tag (200) interrogates and obtains a response from the tag (200) in accordance with a specified process if the tag (200) belongs to a certain class of tags. The response consists of an identification code unique to the tag (200) together with the data supplied by sensors (270, 275) incorporated within the tag (200). Communication between tag (200) and reader (100) is accomplished by a reader (100) establishing a reversing magnetic field in the vicinity of a tag (200) and the tag (200) varying its absorption of power from the field in accordance with the information to be transmitted. The reader (100) detects these variations in power absorption and extracts from these variations the information transmitted by the tag (200).

French Abstract

Un systeme d'identification multi-mode est compose de "lecteurs" et "d'etiquettes". Dans ce systeme, un lecteur (100) a proximite d'une etiquette (200) et couple inductivement (100) a cette etiquette, interroge et obtient une reponse de l'etiquette (200) correspondant avec un traitement specifique si l'etiquette appartient a une certaine classe d'etiquettes. La reponse consiste en un code d'identification particulier a l'etiquette (200) avec des donnees fournies par des detecteurs (270, 275) incorpores dans l'etiquette (200). La communication entre l'etiquette (200) et le lecteur (100) est etablie par un lecteur (100) creant un champ magnetique s'inversant a proximite d'une etiquette (200), l'etiquette (200) modifiant son absorption de puissance du champ selon les informations a transmettre. Le lecteur (100) detecte ces variations d'absorption de puissance et retire de ces variations les informations transmises par l'etiquette (200).

Fulltext Availability: Detailed Description

Detailed Description ... for one type of

tag or for a variety of tags by means of "model' data stored in read - only memory in the form of an integrated circuit, a resistor matrix, or any other means for permanently storing 35 binary data. Mode data include driving frequency, type of modulation (i.e, FSKj, OOK, CPSK, and DCPSK), "mark" and "space" frequencies, bit rate, data encoding if any (e,g, PCT[US93/02112

Manchester or related coding techniques) "start message"

detection process (e.g. cyclic redundancy checks, parity checks), tag type, and all of the constants... ? t47/5, k/31

47/5,K/31 (Item 31 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2004 WIPO/Univentio. All rts. reserv.

00236272

METHOD AND APPARATUS FOR DETECTING AND CORRECTING ERRORS IN DATA ON MAGNETIC TAPE MEDIA

PROCEDE ET APPAREIL DE DETECTION ET DE CORRECTION D'ERREURS DANS DES DONNEES ENREGISTREES SUR SUPPORT MAGNETIQUE

Patent Applicant/Assignee: STORAGE TECHNOLOGY CORPORATION, Inventor(s): DODT William Carl, LIEHE Thomas Gardiner, McCARTHY Donald Francis, MILLIGAN Charles Allen, Patent and Priority Information (Country, Number, Date): WO 9310534 A1 19930527 Patent: WO 92US9598 19921112 (PCT/WO US9209598) Application: Priority Application: US 91791793 19911112 Main International Patent Class: G11B-020/18

Designated States: AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE

International Patent Class: HO3M-13:00; G11B-20:12

Publication Language: English

Fulltext Availability: Detailed Description

Claims

Fulltext Word Count: 10876

English Abstract

The helical scan data write circuits (410, 321) operate on the received stream of data records to produce two orthogonal error detection and correction codes on a scan group level. The data write circuit (410, 321) divides the received stream of data records into data segments, each of which contains a predetermined number of data bytes. A first of these scan group error codes is generated on a per data segment basis while a second scan group error code is generated across multiple data segments. A third level error correcting code (ECC-3) is also used to protect an entire scan group (700) rather than data on a per byte basis. The third level error correction code generator (805) produces an error code over a predetermined number of sequentially written scan groups (700) to enable the control unit (350) to reconstruct an entire scan group (700) if its data integrity is comprised.

French Abstract

Les circuits (410, 321) d'ecriture de donnees a balayage helicoidal agissent sur le flux recu de donnees enregistrees afin de produire deux codes orthogonaux de detection et de correction d'erreurs sur un niveau de groupe de defilement. Le circuit (410, 321) d'ecriture de donnees divise le flux recu de donnees enregistrees en segments de donnees, dont chacun contient un nombre predetermine d'octets de donnees. Un premier code d'erreur de groupe de balayage est genere en fonction de chaque segment de donnees alors qu'un second code d'erreur de groupe de balayage est genere sur plusieurs segments de donnees. Un code de correction d'erreurs (ECC-3) de troisieme niveau est egalement utilise pour proteger un groupe de balayage complet (700) plutot que de proteger des donnees en fonction de chaque octet. Le generateur (805) de code de correction

d'erreur de troisieme niveau produit un code d'erreur sur un nombre predetermine de groupes de balayage (700) inscrits en sequence afin de permettre a l'organe de commande (350) de reconstruire un groupe de balayage entier (700) si l'integrite de donnees est compromise.

Fulltext Availability: Detailed Description

Detailed Description

... two

parallel write paths (402-* to 410-f1, The data that is transf erred f rom buf f er 401 through head switch 4 11 is written into a field memory array 402 so that the data can continuously be supplied to rotating write heads 321,

outer ECC Encoder

While the data is being read in 128 byte segments into field memory array 402, it is also applied to the input of outer ECC encode circuit 403 to produce 8 check bytes of a Reed Solomon error correcting code...

?

```
File 256:SoftBase:Reviews, Companies&Prods. 82-2004/Apr
         (c) 2004 Info. Sources Inc
File
       2:INSPEC 1969-2004/May W1
         (c) 2004 Institution of Electrical Engineers
       6:NTIS 1964-2004/May W2
File
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2004/May W1
File
         (c) 2004 Elsevier Eng. Info. Inc.
      34:SciSearch(R) Cited Ref Sci 1990-2004/May W2
File
         (c) 2004 Inst for Sci Info
      35:Dissertation Abs Online 1861-2004/Apr
File
         (c) 2004 ProQuest Info&Learning
      65:Inside Conferences 1993-2004/May W2
File
         (c) 2004 BLDSC all rts. reserv.
File
      94:JICST-EPlus 1985-2004/Apr W3
         (c) 2004 Japan Science and Tech Corp(JST)
File
      95:TEME-Technology & Management 1989-2004/Apr W4
         (c) 2004 FIZ TECHNIK
      99:Wilson Appl. Sci & Tech Abs 1983-2004/Apr
File
         (c) 2004 The HW Wilson Co.
File 111:TGG Natl.Newspaper Index(SM) 1979-2004/May 13
         (c) 2004 The Gale Group
File 144: Pascal 1973-2004/May W1
         (c) 2004 INIST/CNRS
File 202:Info. Sci. & Tech. Abs. 1966-2004/Feb 27
         (c) 2004 EBSCO Publishing
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File 266: FEDRIP 2004/Mar
         Comp & dist by NTIS, Intl Copyright All Rights Res
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 483: Newspaper Abs Daily 1986-2004/May 10
         (c) 2004 ProQuest Info&Learning
File 583: Gale Group Globalbase (TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 603: Newspaper Abstracts 1984-1988
         (c) 2001 ProQuest Info&Learning
Set
        Items
                Description
                JEDEC OR (JT OR JOINT) () ELECTRONIC ?? ?() DEVICE? ? () ENGINE-
S1
         1144
             ER? ? OR JESD3()C OR JESD()3
                PLD OR PLDS OR FPLD OR FPLDS OR PAL OR PALS OR EPLD OR EPL-
S2
        92323
             DS OR PLA OR PLAS OR PROM OR PROMS OR SPLD OR SPLDS OR CPLD -
             OR CPLDS OR FPGA OR FPGAS
                ROM OR ROMS OR EPROM OR EPROMS OR EEPROMS OR UVR-
S3
       188282
             OM OR UVROMS OR PEEL OR PEELS OR GAL OR GALS
       997740
                PROGRAMABLE OR PROGRAMMABLE OR PROGRAMED OR PROGRAMMED OR -
S4
             PROGRAMING OR PROGRAMMING
         5135
                S4(1W)LOGIC(1W)DEVICE? ?
S5
         6017
S6
                S4(1W)LOGIC(1N)ARRAY? ?
                S4(1W)GATE? ?(1W)ARRAY? ?
        19566
$7
          136
                S4()(IC OR ICS)
SR
                S4(1W)INTEGRATED()CIRCUIT???????
S9
          566
                S4(1W)ELLECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?
S10
S11
           46
                GENERIC (1W) ARRAY? ? (1W) LOGIC? ?
                 (READONLY OR READ()ONLY)(1W)(MEMORY? OR MEMORIES OR STORAG-
        11749
S12
             E?)
S13
      2156949
                STORAGE? OR STORE? ? OR STORING OR MEMORY? OR MEMORIES OR -
             PRESTOR??? ?
                S13(3N)(FIELD? ? OR SPACE? ? OR AREA? ? OR REGION? ? OR SE-
        73414
S14
```

i. 1

```
CTOR? ? OR ZONE? ? OR SECTION? ? OR PART OR PARTS OR PORTION?
             ?)
       144126
S15
                S13 (3N) DATA
                S13(3N) (PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PRO-
        60996
S16
             PERTY? OR PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATT-
             RIBUTES OR BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR -
             FEATURES)
                S4(1W)ELECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?
S17
S18
        16249
                BINARY (1W) TREE? ? OR HUFFMAN
                PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PROPERTY? OR
     15626431
S19
              PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATTRIBUTES OR
              BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR FEATURES
                S19(3N) (COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PACK-
S20
       199082
             ED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR REDU-
             C? OR REDN? ? OR DIMINISH?)
S21
       183048
                S19(3N) (REDUC??? ? OR REDUCTION? OR DECREAS? OR DECREMENT?
             OR ENCOD??? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? -
      1719777
                NONCONFORM? OR INCOMPAT? OR INOPERA? OR UNUSUAL OR DYSFUNC-
S22
             T? OR INCOMPLETE? OR DEVIA? OR IRREGULAR? OR EXCEPTION? ? OR -
             DISTORT?
                DISFUNCT? OR UNCONFORM? OR UNCOMPAT? OR UNCOMPLET? OR DISC-
S23
      2221171
             REPAN? OR DEGRAD? OR DISPARAT? OR BUG? ? OR ERROR? ? OR CORRU-
             PT? OR INVALID?
                MISTAK? OR FAIL???? ? OR PROBLEM? ? OR FAULT? OR DEFECT? OR
$24
      8821503
              DEFICIEN? OR ABNORMA? OR DAMAG? OR FLAW? OR IMPAIR?
S25
       325081
                ABERRA? OR MALFUNCTI? OR IMPERFECT?
                DEBUG? OR DE()BUG???? ? OR ECC OR ECCS OR EDAC OR EDACS
        50542
S26
                S4(1W)ELECTRICAL?? ?(1W)ERAS?(1W)LOGIC? ?
S27
                S22:S25(3N) (DETECT? OR DET? ? OR DETERMIN? OR CHECK? OR CH-
       495700
S28
             EOU? OR DX OR TRACE? ? OR TRACING OR SEEK? OR PROBE? ? OR PRO-
             BING? OR SEARCH? OR SURVEY?)
                S22:S25(3N) (DISCRIMINAT? OR ANALYS? OR ANALYT? OR ANALYZ? -
       731300
S29
             OR ASSESS? OR SELFDIAGNOS? OR SELFTEST? OR BIST OR EXAMIN? OR
             LOCAT? OR REVIEW?)
S30
       452967
                S22:S25(3N) (DIAGNOS? OR IDENTIFY? OR IDENTIFIE? ? OR IDENT-
             IFIC? OR SCREEN? OR APPRAIS? OR EVALUAT? OR SENS??? ? OR RECO-
             GNIS? OR RECOGNIZ? OR RECOGNIT?)
                S22:S25(3N)(INSPECT? OR MONITOR? OR TRACK? OR TEST???? ? OR
$31
       560349
             SCAN OR SCANS OR SCANNED OR SCANN??? ? OR FILTR? OR DETECT???
             ? OR FILTER??? ?)
                DATA(3N) (COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PAC-
S32
       170520
             KED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR RED-
             UC? OR REDN? ? OR DIMINISH?)
                DATA(3N) (DECREAS? OR DECREMENT? OR ENCOD????? ? OR CODIFY? -
        18470
S33
             OR CODIFIE? OR CODIFIC? OR INCOD??? ?)
S34
          137
                (S2:S3 OR S5:S12 OR S27) AND S1
         9694
                (S2:S3 OR S5:S12 OR S27) AND S14:S16
S35
S36
          569
                S35 AND (S18 OR S20:S21 OR S32:S33)
                S36 AND S28:S31
           26
S37
                S36 AND S26
S38
            4
S39
            0
                S36 AND S1
S40
            8
                S35 AND S1
S41
           37
                S37:S40
            5
                $41/2002:2004
S42
           29
                S41 NOT S40
S43
S44
           27
                RD (unique items)
 44/9/4
            (Item 4 from file: 2)
```

DIALOG(R) File

2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

INSPEC Abstract Number: C2001-04-5220-006 Title: A reliable LZ data compressor on reconfigurable coprocessors Author(s): Huang, W.-J.; Saxena, N.; McCluskey, E.J. Author Affiliation: Center for Reliable Comput., Stanford Univ., CA, USA Conference Title: Proceedings 2000 IEEE Symposium on Field-Programmable Custom Computing Machines (Cat. No.PR00871) p.249-58Editor(s): Hutchings, B.L. Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA Publication Date: 2000 Country of Publication: USA x+348 pp. ISBN: 0 7695 0871 5 Material Identity Number: XX-2001-00189 U.S. Copyright Clearance Center Code: 0 7695 0871 5/2000/\$10.00 Conference Title: Proceedings 2000 IEEE Symposium on Field-Programmable Custom Computing Machines Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Comput. Archit Conference Date: 17-19 April 2000 Conference Location: Napa Valley, Language: English Document Type: Conference Paper (PA) Treatment: Practical (P) compression techniques based on the Lempel-Ziv (LZ) Abstract: Data algorithm are widely used in a variety of applications, especially in storage . However, since the LZ algorithm communications and data involves a considerable amount of parallel comparisons, it may be difficult very high throughput using software approaches on achieve general-purpose processors. In addition, error propagation due to single-bit transient errors during LZ causes a compression integrity problem. We present an implementation of LZ data compression on reconfigurable hardware with concurrent error detection for high, performance and reliability. Our approach achieves 100 Mbps throughput using four Xilinx 4036XLA FPGA chips. We also present an inverse comparison technique for LZ compression to guarantee data integrity with less area overhead than traditional systems based on duplication. The resulting execution time overhead and compression ratio degradation due to concurrent error detection is also minimized. (20 Refs) Subfile: C Descriptors: coprocessors; data compression; data integrity; detection; field programmable gate arrays; reconfigurable architectures compressor; reconfigurable coprocessors; data Identifiers: LZ data compression techniques; Lempel-Ziv algorithm; throughput; general-purpose processors; error propagation; single-bit transient errors; data integrity; detection; high performance; Xilinx FPGA chips; execution time Class Codes: C5220 (Computer architecture); C5130 (Microprocessor chips

overhead; compression ratio degradation; reliability; 100 Mbit/s

); C1260 (Information theory); C6130 (Data handling techniques); C5120 (Logic and switching circuits)

Numerical Indexing: bit rate 1.0E+08 bit/s Copyright 2001, IEE

44/9/6 (Item 6 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

INSPEC Abstract Number: B89067767, C89066970 03494899

Title: Built-in test of CMOS state machines with realistic faults: a system perspective

Author(s): Katoozi, M.; Soma, M. Author Affiliation: Seattle Silicon Corp., Bellevue, WA, USA Conference Title: Proceedings of the IEEE 1989 Custom Integrated Circuits Conference (Cat. No.89CH2671-6) p.22.5/1-4

Publisher: IEEE, New York, NY, USA

Publication Date: 1989 Country of Publication: USA 790 pp. U.S. Copyright Clearance Center Code: CH2671-6/89/0000-0139\$01.00

Conference Sponsor: IEEE

Conference Date: 15-18 May 1989 Conference Location: San Diego, CA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: A built-in test system that is capable of parallel testing all combinational and sequential arrays on a CMOS chip is presented. The system is based on a recently introduced tristate multiplexing design for programmable and register logic arrays and requires minimal on-chip test storage and silicon area overhead. The test procedure is tailored to the detection of real mask defects in the layout of the array. The system also uses simple and economical data compaction circuit that provides a good fault coverage while not precluding the use of more sophisticated data compactors. (24 Refs)

Subfile: B C

Descriptors: CMOS integrated circuits; combinatorial circuits; logic arrays; logic testing; sequential circuits

Identifiers: programmable logic arrays; PLA; logic testing; real mask defects detection; combinational arrays; CMOS state machines; built-in test system; parallel testing; sequential arrays; CMOS chip; tristate multiplexing design; register logic arrays; on-chip test storage; test procedure; layout; data compaction circuit

Class Codes: B1265B (Logic circuits); B2570D (CMOS integrated circuits); C5210 (Logic design methods)

44/9/7 (Item 7 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

Title: Data structure of the compact disk-read-only memory system

Author(s): Sako, Y.; Suzuki, T.

Author Affiliation: Inf. Syst. Res. Center, Sony Corp., Tokyo, Japan

Journal: Applied Optics vol.25, no.22 p.3996-4000

Publication Date: 15 Nov. 1986 Country of Publication: USA

CODEN: APOPAI ISSN: 0003-6935

U.S. Copyright Clearance Center Code: 0003-6935/86/223996-05\$02.00/0

Language: English Document Type: Journal Paper (JP)

Treatment: New Developments (N); Practical (P)

Abstract: The compact disk- read - only memory (CD- ROM) system, based on the digital audio compact disk system, is designed as a data storage system for computers by Sony and Philips. This paper outlines the CD- ROM system and describes the data structure (user data, 2K bytes), especially a new error correction system. The performance of this new correction system is good enough to store digital data in the CD- ROM. Two hundred disks in actual use were checked and no uncorrectable error data were found. In addition, this paper summarizes production of CD- ROM disks. (2 Refs)

Subfile: C

Descriptors: CD- ROMs ; video and audio discs

Identifiers: computer data storage system; optical stripe; compact disk-read - only memory system; digital audio compact disk system; Sony; Philips; CD-ROM system; data structure; error correction system; digital data; production; 2 kbytes

Class Codes: C5320K (Optical storage)
Numerical Indexing: memory size 2.0E+03 Byte

44/9/10 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

06445438 E.I. No: EIP03297543912

Title: A fault tolerant hardware based file system manager for solid state mass memory

Author: Cardarilli, G.C.; Ottavi, M.; Pontarelli, S.; Re, M.; Salsano, A. Corporate Source: Department of Electronic Engineering University of Rome Tor Vergata, 00133-Rome, Italy

Conference Title: Proceedings of the 2003 IEEE International Symposium on Circuits and Systems

Conference Location: Bangkok, Thailand Conference Date: 20030525-20030528

Sponsor: IEEE Circuits and Systems Society; Mahanakorn University of Technology

E.I. Conference No.: 61139

Source: Proceedings - IEEE International Symposium on Circuits and Systems v 5 2003. p V649-V652 (IEEE cat n 03CH37430)

Publication Year: 2003

CODEN: PICSDI ISSN: 0271-4310

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 0307W3

Abstract: In this paper the hardware implementation of a file system manager for a fault tolerant Solid State Mass Memory (SSMM) is presented. A hardware implementation of the file system manager implies the following advantages: ad hoc fault tolerant design and graceful degradation capability. The former means developing special fault tolerant hardware for each file system basic function (read, write and delete). For each function different fault tolerant techniques have been applied by considering the impact of different faults on the architecture reliability. Also the area overhead introduced by the chosen fault tolerant technique has been evaluated . Graceful degradation is obtained in terms of data connection reconfiguration and reduced functionality set. We exploited the modularity of the design to implement a distributed file system by means of local handlers on each memory module connected to a dynamic routing module. The file system manager has been used in a SSMM oriented to satellite applications. An FPGA implementation for the complete SSMM has been obtained in order to evaluate the performances and reliability of the SSMM architecture and in particular of the file system manager. 14 Refs.

Descriptors: Data storage equipment; Fault tolerant computer systems; Parallel processing systems; Error correction; Computer architecture; Data transfer; Data acquisition; Data handling; Space applications; Interfaces (computer); Data flow analysis

Identifiers: Solid state mass memory (SSMM)

Classification Codes:

722.1 (Data Storage, Equipment & Techniques); 722.4 (Digital Computers & Systems); 721.1 (Computer Theory (Includes Formal Logic, Automata Theory, Switching Theory & Programming Theory)); 723.2 (Data Processing); 722.2 (Computer Peripheral Equipment); 723.1 (Computer Programming)

722 (Computer Hardware); 721 (Computer Circuits & Logic Elements); 723 (Computer Software, Data Handling & Applications); 656 (Space Flight)

72 (COMPUTERS & DATA PROCESSING); 65 (AEROSPACE ENGINEERING)

```
(Item 3 from file: 8)
DIALOG(R) File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
           E.I. No: EIP96123431103
04567102
   Title: Error
                  characteristics
                                            read - only - memory
                                      of
                                                                        versus
write-once-read-many compact discs: CD- ROM versus CD-WORM
  Author: Tehranchi, Babak; Howe, Dennis G.
Corporate Source: Univ of Arizona, Tucson, AZ, USA
  Source: Applied Optics v 35 n 29 Oct 10 1996. p 5831-5838
  Publication Year: 1996
  CODEN: APOPAI
                  ISSN: 0003-6935
  Language: English
  Document Type: JA; (Journal Article) Treatment: T; (Theoretical)
  Journal Announcement: 9701W4
  Abstract: Some of the parameters that are used to assess the reliability
of data recovered from CD's are described. A brief description of the
error-measurement procedure is provided, and the burst- and gap-length
distributions that were obtained from the examination of eight CD-WORM's
and eight CD- ROM 's are presented. These results correspond to a
byte-by-byte examination of the serial stream of data that is recorded
contiguously on a disc track. A report of an alternative representation for the gap-length probabilities is provided. The measured error statistics for
hard and soft errors are then presented, and their significance is
discussed. Finally, a quantitative means for determining the confidence
limits in the estimation of the measured error-probability values is
provided. The error-measurement results presented in this paper can
ultimately be used to determine the reliability of the data delivered to
users of the various types of CD. 11 Refs.
  Descriptors: Optical data storage; Compact disks; Error
detection; Probability; Error correction; Codes (symbols); Error
analysis; Integral equations
  Identifiers: Write once read many compact discs; Error bursts; Error
measurement; Confidence limits; Cross interleaved Reed-Solomon code; Good
data gaps
  Classification Codes:
  752.3.1 (Sound Reproduction Equipment)
  722.1 (Data Storage, Equipment & Techniques); 752.3 (Sound
Reproduction); 721.1 (Computer Theory, Includes Formal Logic, Automata
Theory, Switching Theory, Programming Theory); 922.1 (Probability Theory);
      (Data Processing); 921.2 (Calculus)
(Computer Hardware); 752 (Sound Equipment & Systems); 721
(Computer Circuits & Logic Elements); 922 (Statistical Methods); 723
(Computer Software); 921 (Applied Mathematics)
      (COMPUTERS & DATA PROCESSING); 75 (ACOUSTICAL TECHNOLOGY); 92
(ENGINEERING MATHEMATICS)
 44/9/12
             (Item 4 from file: 8)
               8:Ei Compendex(R)
DIALOG(R)File
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
04375249 E.I. No: EIP96023035859
  Title: Is there a CD-R media problem?
  Author: Cochrane, Katherine
  Corporate Source: CD-Info Co, Inc, Huntsville, AL, USA
  Source: CD-ROM Professional v 9 n 2 Feb 1996. 9pp
  Publication Year: 1996
                  ISSN: 1049-0833
  CODEN: CRPFEX
```

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review) Journal Announcement: 9605W5

Abstract: There is currently a free-floating anxiety in industry and business circles about whether the CD-Recordable discs is being used are any good. Several criteria go into evaluating disc usefulness: readability, compatibility with recorders and players, and expected lifespan. Results amassed in a series of tests performed by One-Off CD Shops International between early 1993 and mid-1995 on a variety of disc brands and types shed light on the topic, even though the tests were done only to evaluate readability of recorded discs, and not media longevity or suitability of specific brands or types for use on every system. However, the methodological rigor the narrow focus afforded yielded considerable data that bodes well for the effectiveness of current disc-evaluating mechanisms. Not every question has been answered by any means, but one finding is clear: worry about the quality of CD-R media seems largely unfounded.

Descriptors: CD- ROM; Computer testing; Compact disks; Data recording; Digital storage; Standards; Digital to analog conversion; Error detection; Error correction; Performance

Identifiers: CD-recordable discs; Readability testing; Replicated discs; CD-digital audio; Troubleshooting; Digital errors; Analog errors; Physical errors; Logical errors; Error rates

Classification Codes:

752.3.1 (Sound Reproduction Equipment)

722.1 (Data Storage, Equipment & Techniques); 752.3 (Sound Reproduction); 723.2 (Data Processing); 722.4 (Digital Computers & Systems)

722 (Computer Hardware); 752 (Sound Equipment & Systems); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING); 75 (ACOUSTICAL TECHNOLOGY) ? t44/9/16-17,19-20,23

44/9/16 (Item 8 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

01338158 E.I. Monthly No: EI8303017191 E.I. Yearly No: EI83023041

Title: ROM EMULATOR FOR THE CONNECTION OF THE PROM PROGRAMMER UPP103.

Author: Storandt, Steffen

Corporate Source: Siemens, Munich, Ger

Source: Siemens Components v 17 n 5 Oct 1982 p 154-155

Publication Year: 1982

CODEN: SICOD5 Language: ENGLISH

Journal Announcement: 8303

Abstract: Programs and constants for Random Access Memories (ROMs) usually are developed by means of a microcomputer development system, for instance the Siemens microcomputer development systems SME. The user hardware is connected with the emulation and test adapter (ETA). The programs and the constants are stored in the development system. The program steps can be monitored on the CRT, failure recognized and eliminated. The elaboration of a program or of constants using an ETA may be limited or not possible. A low-cost and time saving auxiliary equipment for SME is presented that features reduced programming time, erasing time savings for the erasable programmable ROM (EPROM), no replugging of the EPROM from programming equipment to hardware, and no wear due to frequent erasing and programming actions.

Descriptors: DATA STORAGE, DIGITAL--*Random Access; COMPUTER PROGRAMMING--Monitoring; COMPUTERS, MICROPROCESSOR--Applications Identifiers: PROGRAMMABLE ROM (PROM); EMULATION AND TEST ADAPTER

(DTA)
 Classification Codes:
 722 (Computer Hardware); 723 (Computer Software)
 72 (COMPUTERS & DATA PROCESSING)

44/9/17 (Item 9 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

01194934 E.I. Monthly No: EI8209076896 E.I. Yearly No: EI82025918

Title: SMART CONTROLLER MEETS DISK-MEMORY CHALLENGE.

Author: Chu, Paul; Kitson, Brad; Tabler, Otis

Corporate Source: Adv Micro Devices Inc, Sunnyvale, Calif, USA Source: Electronic Design v 30 n 13 Jun 24 1982 p 133-138, 140, 142

Publication Year: 1982

CODEN: ELODAW ISSN: 0013-4872

Language: ENGLISH

Journal Announcement: 8209

Abstract: A smart controller can conserve disk storage space through its data compression function and increase access speed through request queueing. Both functions, as well as read and write routines, are microcoded into the controller's logic and stored in registered PROM . An intelligent controller can detect and correct burst errors - impractical tasks at best for the host computer - ensuring that data are transferred accurately and reliably. High-speed data transfer, supporting firmware, and extensive error detection and correction capabilities characterize a VLSI disk controller which is described. The latter was designed to keep pace with read/write circuits and head technologies.

Descriptors: DATA STORAGE , MAGNETIC--*Disk; INTEGRATED CIRCUITS--Very Large Scale Integration

Classification Codes:

721 (Computer Circuits & Logic Elements); 722 (Computer Hardware); 713 (Electronic Circuits); 714 (Electronic Components)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

44/9/19 (Item 1 from file: 35)

DIALOG(R) File 35: Dissertation Abs Online (c) 2004 ProQuest Info&Learning. All rts. reserv.

1083855 ORDER NO: AAD90-00260

BUILT-IN TEST OF CMOS STRUCTURED LOGIC WITH REALISTIC FAULT MODELS

Author: KATOOZI, MEHDI

Degree: PH.D. Year: 1989

Corporate Source/Institution: UNIVERSITY OF WASHINGTON (0250)

CHAIRPERSON: MANI SOMA

Source: VOLUME 50/08-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 3624. 115 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544

Built-in test has surfaced as a solution to the costly test generation and data storage problems. Structured designs such as programmable and storage logic arrays (PLA and SLA) are also desirable alternatives to random logic implementations of integrated circuits due to their ease of synthesis. Structured design for built-in testability is the main objective of this dissertation.

Yield analysis studies indicate that testing arrays for classical

faults does not provide sufficient coverage of real physical defects. Another shortcoming of the existing test techniques is their loss of practicality for large arrays due to a large hardware overhead. Testing SLAs is further complicated by their feedback. Functional test is time consuming and requires the transformation of the state machine to a testable one with a different state table. Functional test of the transformed machine does not always assure the correct functionality of the original one. Furthermore, faults that give rise to extraneous transitions are not detected because functional test only checks the transitions in the original design.

This thesis presents a new design for structural testing of CMOS arrays. Tri-state capability is used to allow testing of the SLA with exactly the same overhead as the PLA regardless of feedback. The overhead is lower than the existing techniques and decreases with increased array size, making the technique practical for large arrays. Real faults resulting from mask defects are analyzed for their electrical effect on the circuit. Special features are incorporated into the layout to eliminate or provide tolerance to undetectable faults. Requirements for detecting the remaining faults are derived and met by adding appropriate product lines. Deficiencies in functional test of storage elements are identified and eliminated by layout practices that reduce the probability of undetectable faults.

A built-in test technique is proposed that accommodates the parallel testing of arrays. This scheme requires minimal on-chip test storage, and a simple data compaction circuit. The testable array is implemented in double metal, CMOS technology. Simulation indicates no performance penalty associated with the test circuitry which stems from the fact that no extra gate delays are introduced in the input signal path.

44/9/20 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

04324443 JICST ACCESSION NUMBER: 99A0909894 FILE SEGMENT: JICST-E Testing the SRAM-based FPGAs .
DOUMAR A (1); ITO H (1)

/1) Chiha Univ. Inn

(1) Chiba Univ., Jpn

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report (Institute of Electronics, Information and Communication Enginners), 1999, VOL.99,NO.250(FTS99 31-39), PAGE.43-50, FIG.7, TBL.6, REF.13

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.382.08

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

ABSTRACT: This paper presents a new design for testing SRAM-based field programmable gate arrays (FPGAs). The new proposed method is able to test both the configurable logic blocks(CLBs) and the interconnection networks for a wide fault model including stuck at fault, bridging fault and open fault. The proposed design is consisting on a slightly modifying the original SRAM part in FPGA so that it will allow the configuration data to be looped on-chip and then the test becomes easier. This method requires a very short test time comparing to the previous works. More over the off-chip memory used in the storage of the configurations data is considerably reduced. The application of this method on XC4000 family and ORCA shows that (relatively to that required by the previous works) the test time can be reduced by 87.2% and the required off-chip memory can be reduced by

88.6%. (author abst.)

DESCRIPTORS: FPGA; SRAM; circuit test; testability; fault detection;
fault diagnosis; failure mode(reliability

BROADER DESCRIPTORS: ASIC; integrated circuit; micro circuit; RAM;
memory(computer); equipment; static memory; test; possibility; system characteristic; characteristic; detection; diagnosis

CLASSIFICATION CODE(S): NC03040G

44/9/23 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

10337784 PASCAL No.: 92-0541244
Efficient computation of the squaring operation in modular rings
RAO P B; SKAVANTZOS A
Louisiana state univ., dep. electrical computer eng., Baton Rouge LA
70803, USA
Journal: Electronics letters, 1992, 28 (17) 1628-1630
ISSN: 0013-5194 CODEN: ELLEAK Availability: INIST-12270;
354000020452930400

No. of Refs.: 7 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: United Kingdom

Language: English

Modular arithmetic is used extensively in signal processing and in error detecting and correcting codes. In these applications many modulo operations are obtained using table lookup techniques. In the Letter, new and simple memory compression techniques are presented that result in significant ROM bit savings, to compute the squaring operation modulo m

English Descriptors: Signal processing; Error correcting code; Error
 detecting code; Read only memory (ROM); Data reduction;
 Arithmetics; Digital signal; Data compression
French Descriptors: Traitement signal; Code correcteur erreur; Code
 detecteur erreur; Memoire morte; Reduction donnee; Arithmetique; Signal
 numerique; Compression donnee

Classification Codes: 001D03F06B

```
9:Business & Industry(R) Jul/1994-2004/May 12
File
         (c) 2004 The Gale Group
      16:Gale Group PROMT(R) 1990-2004/May 13
File
         (c) 2004 The Gale Group
      47:Gale Group Magazine DB(TM) 1959-2004/May 13
File
         (c) 2004 The Gale group
File 148:Gale Group Trade & Industry DB 1976-2004/May 13
         (c) 2004 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 275: Gale Group Computer DB(TM) 1983-2004/May 13
         (c) 2004 The Gale Group
File 570: Gale Group MARS(R) 1984-2004/May 13
         (c) 2004 The Gale Group
File 621:Gale Group New Prod. Annou. (R) 1985-2004/May 12
         (c) 2004 The Gale Group
File 636: Gale Group Newsletter DB(TM) 1987-2004/May 13
         (c) 2004 The Gale Group
File 649: Gale Group Newswire ASAP(TM) 2004/May 12
         (c) 2004 The Gale Group
Set
        Items
                Description
                JEDEC OR (JT OR JOINT) () ELECTRONIC ?? () DEVICE? ? () ENGINE-
S1
         7319
             ER? ? OR JESD3()C OR JESD()3
                PLD OR PLDS OR FPLD OR FPLDS OR PAL OR PALS OR EPLD OR EPL-
       137569
S2
             DS OR PLA OR PLAS OR PROM OR PROMS OR SPLD OR SPLDS OR CPLD -
             OR CPLDS OR FPGA OR FPGAS
                ROM OR ROMS OR EPROM OR EPROMS OR EEPROM OR EEPROMS OR UVR-
S3
       608138
             OM OR UVROMS OR PEEL OR PEELS OR GAL OR GALS
                PROGRAMABLE OR PROGRAMMABLE OR PROGRAMED OR PROGRAMMED OR -
S4
      1273243
             PROGRAMING OR PROGRAMMING
        16705
                S4(1W)LOGIC(1W)DEVICE? ?
S5
S6
         4559
                S4(1W)LOGIC(1N)ARRAY? ?
        12736
                S4 (1W) GATE? ? (1W) ARRAY? ?
S7
                S4()(IC OR ICS)
S8
          720
          798
                S4(1W)INTEGRATED()CIRCUIT???????
S9
                S4(1W)ELLECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?
S10
            0
S11
          243
                GENERIC (1W) ARRAY? ? (1W) LOGIC? ?
                (READONLY OR READ()ONLY)(1W)(MEMORY? OR MEMORIES OR STORAG-
S12
        17152
             E?)
                STORAGE? OR STORE? ? OR STORING OR MEMORY? OR MEMORIES OR -
      5133532
S13
             PRESTOR??? ?
                S13(3N)(FIELD? ? OR SPACE? ? OR AREA? ? OR REGION? ? OR SE-
S14
       374487
             CTOR? ? OR ZONE? ? OR SECTION? ? OR PART OR PARTS OR PORTION?
       330630
                S13 (3N) DATA
S15
                S13(3N) (PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PRO-
S16
       158531
             PERTY? OR PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATT-
             RIBUTES OR BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR -
             FEATURES)
                S4(1W)ELECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?
S17
            2
                BINARY (1W) TREE? ? OR HUFFMAN
S18
         9524
S19
     10461252
                PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PROPERTY? OR
              PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATTRIBUTES OR
              BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR FEATURES
                S19(3N) (COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PACK-
       159020
S20
             ED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR REDU-
             C? OR REDN? ? OR DIMINISH?)
$21
                S19(3N)(REDUC???? ? OR REDUCTION? OR DECREAS? OR DECREMENT?
             OR ENCOD??? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? -
```

🤻 ، ، 🏂

- S22 1228929 NONCONFORM? OR INCOMPAT? OR INOPERA? OR UNUSUAL OR DYSFUNC-T? OR INCOMPLETE? OR DEVIA? OR IRREGULAR? OR EXCEPTION? ? OR -DISTORT?

 S23 1137076 DISFUNCT? OR UNCONFORM? OR UNCOMPAT? OR UNCOMPLET? OR DISC-REPAN? OR DEGRAD? OR DISPARAT? OR BUG? ? OR ERROR? ? OR CORRU-
- PT? OR INVALID? S24 6149992 MISTAK? OR FAIL???? ? OR PROBLEM? ? OR FAULT? OR DEFECT? OR DEFICIEN? OR ABNORMA? OR DAMAG? OR FLAW? OR IMPAIR?
- S25 96832 ABERRA? OR MALFUNCTI? OR IMPERFECT?
- S26 120242 DEBUG? OR DE()BUG???? ? OR ECC OR ECCS OR EDAC OR EDACS
- S27 151 S4(1W) ELECTRICAL?? ?(1W) ERAS?(1W) LOGIC? ?
- S28 293156 S22:S25(3N) (DETECT? OR DET? ? OR DETERMIN? OR CHECK? OR CHEQU? OR DX OR TRACE? ? OR TRACING OR SEEK? OR PROBE? ? OR PROBING? OR SEARCH? OR SURVEY?)
- S29 204644 S22:S25(3N) (DISCRIMINAT? OR ANALYS? OR ANALYT? OR ANALYZ? OR ASSESS? OR SELFDIAGNOS? OR SELFTEST? OR BIST OR EXAMIN? OR LOCAT? OR REVIEW?)
- S30 259187 S22:S25(3N) (DIAGNOS? OR IDENTIFY? OR IDENTIFIE? ? OR IDENT-IFIC? OR SCREEN? OR APPRAIS? OR EVALUAT? OR SENS??? ? OR RECO-GNIS? OR RECOGNIZ? OR RECOGNIT?)
- S31 275514 S22:S25(3N)(INSPECT? OR MONITOR? OR TRACK? OR TEST????? OR SCAN OR SCANS OR SCANNED OR SCANN????? OR FILTR? OR DETECT????? OR FILTER?????)
- S32 126401 DATA(3N) (COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PAC-KED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR RED-UC? OR REDN? ? OR DIMINISH?)
- S33 16851 DATA(3N) (DECREAS? OR DECREMENT? OR ENCOD???? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? ?)
- S34 769 (S2:S3 OR S5:S12 OR S27) (S)S1
- S35 20538 (S2:S3 OR S5:S12 OR S27)(S)S14:S16
- S36 638 S35(S)(S18 OR S20:S21 OR S32:S33)
- S37 15 S36(S)S28:S31
- \$38 7 \$36(\$)\$26
- S39 1 S36(S)S1
- S41 0 S40/2002:2004 S42 13 RD S40 (unique items)
- 42/3,K/6 (Item 6 from file: 16)

01139248 Supplier Number: 41290225

DIALOG(R) File 16: Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.

ALTERA AND ATMEL EPLD SUPPORT ADDED TO TANGO-PLD

News Release, pl April 23, 1990

Language: English Record Type: Abstract

Document Type: Magazine/Journal; Trade

ABSTRACT:

ACCEL Technologies has just released Version 1.11 of their Tango- PLD software for programmable logic device design. This newest version adds support for four Altera EPLD devices: the EP310, 320, 600 and 900 plus a device model for the 40-pin, UV-erasable Atmel V2500. This release also features reduced memory requirements, which permit large, complex designs without requiring expanded memory. TangoPLD now supports 109 PAL, GAL and PEEL devices and provides the capability of designing the industry's most popular programmable logic devices. Tango- PLD is a design compiler, logic mirvmizer and simulator combined into one easy-to-use program. It offers innovative features, speed and

simplicity. Some of Tango- PLDO 's features include: separation of the logic design phase from the device selection phase, so that the designer can refine and test a logic design prior to deciding which PLD to use; multiple device simulation, allowing a complex design consisting of several interconnected PLDs to be tested with a single set of test vectors; test vector coverage analysis; the...

...blocks and groups (indexed variables) for concise design descriptions and test vector generation; industry-standard JEDEC files for component programlning; unique cross reference and source listing files for source-level debugging; and faster simulation and logic minimization than other popular PLD programs, which speeds up the overall design process.

?

فالمان والجم

```
File 696:DIALOG Telecom. Newsletters 1995-2004/May 12
         (c) 2004 The Dialog Corp.
      15:ABI/Inform(R) 1971-2004/May 13
File
         (c) 2004 ProQuest Info&Learning
File
      98:General Sci Abs/Full-Text 1984-2004/May
         (c) 2004 The HW Wilson Co.
File 484:Periodical Abs Plustext 1986-2004/May W2
         (c) 2004 ProQuest
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2004/May 13
         (c) 2004 PR Newswire Association Inc
File 635:Business Dateline(R) 1985-2004/May 13
         (c) 2004 ProQuest Info&Learning
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 610: Business Wire 1999-2004/May 13
         (c) 2004 Business Wire.
File 369: New Scientist 1994-2004/May W1
         (c) 2004 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
File 20:Dialog Global Reporter 1997-2004/May 13
         (c) 2004 The Dialog Corp.
File 624:McGraw-Hill Publications 1985-2004/May 13
         (c) 2004 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2004/May 12
         (c) 2004 San Jose Mercury News
File 647:CMP Computer Fulltext 1988-2004/May W1
         (c) 2004 CMP Media, LLC
File 674: Computer News Fulltext 1989-2004/May W1
         (c) 2004 IDG Communications
Set
        Items
                Description
                JEDEC OR (JT OR JOINT) () ELECTRONIC ?? ?() DEVICE? ? () ENGINE-
S1
         2976
             ER? ? OR JESD3()C OR JESD()3
                PLD OR PLDS OR FPLD OR FPLDS OR PAL OR PALS OR EPLD OR EPL-
S2
       173824
             DS OR PLA OR PLAS OR PROM OR PROMS OR SPLD OR SPLDS OR CPLD -
             OR CPLDS OR FPGA OR FPGAS
S3
       363982
                ROM OR ROMS OR EPROM OR EPROMS OR EEPROM OR EEPROMS OR UVR-
             OM OR UVROMS OR PEEL OR PEELS OR GAL OR GALS
                PROGRAMABLE OR PROGRAMMABLE OR PROGRAMMED OR -
S4
       784518
             PROGRAMING OR PROGRAMMING
         7568
S5
                S4(1W)LOGIC(1W)DEVICE? ?
S6
          556
                S4(1W)LOGIC(1N)ARRAY? ?
S7
         5904
                S4(1W)GATE? ?(1W)ARRAY? ?
                S4()(IC OR ICS)
S8
          363
                S4(1W)INTEGRATED()CIRCUIT???????
S9
          473
                S4(1W)ELLECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?
S10
            0
          156
                GENERIC (1W) ARRAY? ? (1W) LOGIC? ?
S11
                (READONLY OR READ()ONLY)(1W)(MEMORY? OR MEMORIES OR STORAG-
S12
         5599
             E?)
                STORAGE? OR STORE? ? OR STORING OR MEMORY? OR MEMORIES OR -
      3657602
S13
             PRESTOR??? ?
                S13(3N)(FIELD? ? OR SPACE? ? OR AREA? ? OR REGION? ? OR SE-
S14
       232848
             CTOR? ? OR ZONE? ? OR SECTION? ? OR PART OR PARTS OR PORTION?
       173023
                S13 (3N) DATA
S15
                S13(3N) (PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PRO-
S16
        82206
             PERTY? OR PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATT-
             RIBUTES OR BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR -
```

7

FEATURES)

S17 1 S4(1W)ELECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?

S18 8195 BINARY(1W)TREE? ? OR HUFFMAN

S19 9475671 PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR

S19 9475671 PARAMETER? OR PARAMETRE? OR VALUE OR VALUES OR PROPERTY? OR PROPERTIES OR CHARACTERISTIC? ? OR ATTRIBUTE OR ATTRIBUTES OR BOUND? ? OR CRITERIA? OR CRITERION? OR FEATURE OR FEATURES

S20 115319 S19(3N)(COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PACK-ED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR REDU-C? OR REDN? ? OR DIMINISH?)

S21 102311 S19(3N) (REDUC??? ? OR REDUCTION? OR DECREAS? OR DECREMENT?
OR ENCOD??? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? ?)

S22 1515521 NONCONFORM? OR INCOMPAT? OR INOPERA? OR UNUSUAL OR DYSFUNC-T? OR INCOMPLETE? OR DEVIA? OR IRREGULAR? OR EXCEPTION? ? OR -DISTORT?

S23 1496150 DISFUNCT? OR UNCONFORM? OR UNCOMPAT? OR UNCOMPLET? OR DISC-REPAN? OR DEGRAD? OR DISPARAT? OR BUG? ? OR ERROR? ? OR CORRU-PT? OR INVALID?

S24 9053722 MISTAK? OR FAIL???? ? OR PROBLEM? ? OR FAULT? OR DEFECT? OR DEFICIEN? OR ABNORMA? OR DAMAG? OR FLAW? OR IMPAIR?

S25 120812 ABERRA? OR MALFUNCTI? OR IMPERFECT?

S26 54303 DEBUG? OR DE()BUG???? ? OR ECC OR ECCS OR EDAC OR EDACS

113 S4(1W)ELECTRICAL?? ?(1W)ERAS?(1W)LOGIC? ?

S28 277866 S22:S25(3N) (DETECT? OR DET? ? OR DETERMIN? OR CHECK? OR CHECK? OR DX OR TRACE? ? OR TRACING OR SEEK? OR PROBE? ? OR PROBING? OR SEARCH? OR SURVEY?)

S29 231537 S22:S25(3N)(DISCRIMINAT? OR ANALYS? OR ANALYT? OR ANALYZ? OR ASSESS? OR SELFDIAGNOS? OR SELFTEST? OR BIST OR EXAMIN? OR
LOCAT? OR REVIEW?)

S30 269666 S22:S25(3N) (DIAGNOS? OR IDENTIFY? OR IDENTIFIE? ? OR IDENT-IFIC? OR SCREEN? OR APPRAIS? OR EVALUAT? OR SENS??? ? OR RECO-GNIS? OR RECOGNIZ? OR RECOGNIT?)

S31 236769 S22:S25(3N)(INSPECT? OR MONITOR? OR TRACK? OR TEST??? ? OR SCAN OR SCANS OR SCANNED OR SCANN??? ? OR FILTR? OR DETECT??? ? OR FILTER??? ?)

S32 64456 DATA(3N) (COMPRESS???? ? OR COMPACT???? ? OR PACK? ? OR PAC-KED OR PACKING OR MINIMIZ? OR MINIMIS? OR CONDENS??? ? OR RED-UC? OR REDN? ? OR DIMINISH?)

9487 DATA(3N)(DECREAS? OR DECREMENT? OR ENCOD???? ? OR CODIFY? OR CODIFIE? OR CODIFIC? OR INCOD??? ?)

S34 247 (S2:S3 OR S5:S12 OR S27)(S)S1

S35 7488 (S2:S3 OR S5:S12 OR S27)(S)S14:S16

S36 218 S35(S)(S18 OR S20:S21 OR S32:S33)

S37 5 S36(S)S28:S31

S38 0 S36(S)S1

\$39 2 \$36(\$)\$26

S40 6 S37:S39

S41 5 RD (unique items)

41/3,K/3 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter

(c) 2004 The Dialog Corp. All rts. reserv.

23392952 (USE FORMAT 7 OR 9 FOR FULLTEXT)

SystemBIST IP enables system-wide Embedded Test and Programmable Logic Configuration

BUSINESS WIRE

S27

June 17, 2002

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 890

... FLASH for test and configuration memory --Small FLASH memory requirements due to test and configuration data re-use and compression --Reduced PCB parts cost and area for programming FPGAs . --Verification and fast downloads of configuration and test files using Eclipse(TM) tool --Support for...

W

... intellitech.com for more information. About Intellitech: Intellitech is the technology leader in scan-based debug and test solutions for SoC (System-on-a-Chip), ICs, PCBs and Systems. Intellitech's TEST-IP(TM) family provides patent pending infrastructure IP that enables embedded test, debug and configuration of ICs, PCBs and Systems. Intellitech's proprietary solutions enable customers to build...

... Diagnostic and Test tools to provide a powerful combination of hardware and software tools for **debug** analysis and test validation, prior to embedding into the customer's product. Intellitech is focused...

... the company has been successful in introducing new solutions based on IEEE 1149.1 configuration, **debug** and test technology. Intellitech's customer base ranges from companies providing the latest networking products...



```
File 347: JAPIO Nov 1976-2003/Dec(Updated 040402)
         (c) 2004 JPO & JAPIO
File 350: Derwent WPIX 1963-2004/UD, UM &UP=200429
         (c) 2004 Thomson Derwent
File 348: EUROPEAN PATENTS 1978-2004/May W01
         (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040506,UT=20040429
         (c) 2004 WIPO/Univentio
Set
        Items
                Description
           98
               AU='GREEN D'
S1
S2
           89
               AU='GREEN D J'
S3
               AU='GREEN DAVID'
           24
S4
                AU='GREEN DAVID J':AU='GREEN DAVID JOHN'
           65
$5
           52
                AU='PAK S'
S6
                AU='PAK S Y'
           1
                AU='NAN F'
S7
           12
                S1:S4 AND S5:S7
S8
            Λ
                JEDEC OR (JT OR JOINT) () ELECTRONIC?? ? () DEVICE? ? () ENGINE-
S9
          440
             ER? ? OR JESD3()C OR JESD()3
                PLD OR PLDS OR FPLD OR FPLDS OR PAL OR PALS OR EPLD OR EPL-
S10
        54631
             DS OR PLA OR PLAS OR PROM OR PROMS OR SPLD OR SPLDS OR CPLD -
             OR CPLDS OR FPGA OR FPGAS
S11
                ROM OR ROMS OR EPROM OR EPROMS OR EEPROM OR EEPROMS OR UVR-
       304330
             OM OR UVROMS OR PEEL OR PEELS OR GAL OR GALS
                PROGRAMABLE OR PROGRAMMABLE OR PROGRAMED OR -
$12
       259535
             PROGRAMING OR PROGRAMMING
         6033
                S12(1W)LOGIC(1W)DEVICE? ?
S13
                S12(1W)LOGIC(1N)ARRAY? ?
S14
         4845
S15
         7113
                S12(1W)GATE? ?(1W)ARRAY? ?
S16
          219
                S12()(IC OR ICS)
         1046
                S12(1W) INTEGRATED() CIRCUIT???????
S17
S18
            0
                S12(1W)ELLECTRICAL?? ?(1W)ERASE???? ?(1W)LOGIC? ?
           78
                GENERIC (1W) ARRAY? ? (1W) LOGIC? ?
S19
        53930
                (READONLY OR READ()ONLY)(1W)(MEMORY? OR MEMORIES OR STORAG-
S20
             E?)
           41
                S12(1W)ELECTRICAL?? ?(1W)ERAS?(1W)LOGIC? ?
S21
S22
          339
                S1:S7
S23
                S22 AND S9
            0
S24
                S22 AND (S10:S11 OR S13:S21)
 24/TI/1
             (Item 1 from file: 350)
DIALOG(R) File 350: (c) 2004 Thomson Derwent. All rts. reserv.
```

Digital video segment identification method in entertainment system, involves associating approximated frames of digital video record until preset percentage of video record play back time is taken by associated commercials

```
24/TI/2 (Item 2 from file: 350)
DIALOG(R) File 350:(c) 2004 Thomson Derwent. All rts. reserv.
```

Device specification creating method e.g. for silicon device, involves polymorphing base class representing the rules for programmable die according to filtered device definitions

```
24/TI/3 (Item 3 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.
```

B. Y

Prepn. of combustible gas, charcoal and tar by using waste plate as raw material.

24/TI/4 (Item 4 from file: 350)
DIALOG(R)File 350:(c) 2004 Thomson Derwent. All rts. reserv.

A-D converter scheduling system for input-data sampling - synchronises sampling with process controller using adaptive scheduling

24/TI/5 (Item 1 from file: 349)
DIALOG(R)File 349:(c) 2004 WIPO/Univentio. All rts. reserv.

DUAL STAGE INFLATOR WITH EXTENDED GAS DELIVERY FOR A VEHICULAR AIRBAG SYSTEM

GONFLEUR A DEUX ETAGES AVEC DISTRIBUTION ETENDUE DE GAZ POUR UN SYSTEME D'AIRBAG DE VEHICULE

24/TI/6 (Item 2 from file: 349)
DIALOG(R)File 349:(c) 2004 WIPO/Univentio. All rts. reserv.

DUAL FLOW INFLATOR FOR A VEHICULAR AIRBAG SYSTEM GONFLEUR A FLUX DOUBLE POUR SYSTEME D'AIRBAGS DE VEHICULES

24/TI/7 (Item 3 from file: 349)
DIALOG(R) File 349: (c) 2004 WIPO/Univentio. All rts. reserv.

APPARATUS FOR SPECTROPHOTOMETRY AND METHOD OF OBTAINING SPECTROPHOTOMETRICAL INFORMATION

APPAREIL DE SPECTROPHOTOMETRIE ET MODE DE RECUEIL DE L'INFORMATION SPECTROPHOTOMETRIQUE

24/TI/8 (Item 4 from file: 349)
DIALOG(R) File 349: (c) 2004 WIPO/Univentio. All rts. reserv.

PRESSURE-MEDIATED BINDING OF BIOMOLECULAR COMPLEXES ASSOCIATION PAR PRESSION DE COMPLEXES BIOMOLECULAIRES

24/TI/9 (Item 5 from file: 349)
DIALOG(R) File 349: (c) 2004 WIPO/Univentio. All rts. reserv.

REPEATER INFORMATION BASE FOR SNMP NETWORK MANAGEMENT STATISTICS ACCUMULATION

BASE D'INFORMATION DE REPETEUR POUR AIDER A L'ACCUMULATION DE STATISTIQUES ET DE DONNEES DE GESTION DE RESEAU, OBTENUES PAR UN PROTOCOLE DE GESTION DE RESEAU SIMPLE